BEFORE THE BOARD OF OIL, GAS AND MINING
DEPARTMENT OF NATURAL RESOURCES
STATE OF UTAH

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IN THE MATTER OF THE REQUEST FOR AGENCY ACTION OF SNYDER OIL CORPORATION FOR AN ORDER MODIFYING THE ORDER IN CAUSE NO. 179-1 TO AUTHORIZE THE DRILLING OF ADDITIONAL WELLS IN ESTABLISHED DRILLING UNITS IN THE BONANZA FIELD AREA IN UINTAH COUNTY, UTAH, AS TO THE WASATCH AND MESA VERDA FORMATIONS; MODIFYING SET BACK REQUIREMENTS; AND AUTHORIZING COMMINGLING OF PRODUCTION FROM PRODUCING HORIZONS	:	FINDINGS OF FACT, CONCLUSIONS OF LAW, AND ORDER DOCKET NO. 94-010 CAUSE NO. 179-6

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This cause came on regularly for hearing before the Board of Oil, Gas and Mining (the "Board") on Wednesday, April 27, 1994, at 10:00 a.m., in the Boardroom of the Division of Oil, Gas and Mining at 355 West North Temple, 3 Triad Center, Suite 520, Salt Lake City, Utah.

The following Board members present and participating in the hearing were: Chairman Dave D. Lauriski, Judy F. Lever, Jay L. Christensen, Kent G. Stringham, Raymond Murray, Thomas Faddies, and Elise L. Erler. Staff members of the Division of Oil, Gas and Mining (the "Division") present and participating in the hearing included James W. Carter, Director; Ronald J. Firth, Associate Director for Oil and Gas; Brad Hill, geologist; and Frank Matthews, petroleum engineer.

Phillip Wm. Lear, Esq., of Snell & Wilmer appeared on behalf of Snyder Oil Corporation ("Snyder"); and Julie L. Weber, Linda M. Jacobs, and William E. Richardson appeared as witnesses for Snyder.

Thomas A. Mitchell, Esq., Assistant Attorney General, represented the Board; and William R. Richards, Esq., Assistant Attorney General, represented the Division. No persons appeared in opposition.

Robert A. Henricks, Chief, Branch of Fluid Minerals (Utah State Office); Assad N. Raffoul, petroleum engineer (Utah State Office); and Edwin Forsgren, petroleum engineer (Vernal District Office) appeared for the United States of the Interior, Bureau of Land Management.

NOW THEREFORE, the Board, having fully considered the testimony adduced and the exhibits received at the hearing, and being fully advised in the premises, makes and enters its Findings of Fact, Conclusions of Law, and Order, as follows:

FINDINGS OF FACT

1. The Board mailed notice of the April 27, 1994, hearing to all interested parties by certified mail, return receipt requested on April 1, 1994, and caused notice to be published in the *Deseret News* and in the *Salt Lake Tribune* on April 4, 1994, and in the *Vernal Express* on April 6, 1994.

2. Snyder mailed photocopies of the Request for Agency action to all owners.

3. Snyder is a Delaware Corporation in good standing, having its principal place of business in Fort Worth, Texas. Snyder is licensed to do business in Utah.

4. The lands affected by the Request for Agency Action are public domain lands of the United States of America, administered by the Bureau of Land Management ("BLM"); allotted Indian lands; and trust lands of the State of Utah, administered by the Utah Division of State Lands and Forestry.

5. By Order in Cause No. 179-1 dated October 24, 1978 (the "Order"), the Board established 320-acre stand-up[1] drilling units for the Bonanza Field Area of Uintah County for the production of oil, gas and associated hydrocarbons from the common source of supply in the Green River, Wasatch, Mesa Verde, and Castlegate formations in the following described lands in Uintah County, Utah;

Township 10 South, Range 23 East, S.L.M.

Section 1: All
Section 2: All
Section 3: All
Section 4: All
Section 5: All
Section 6: All
Section 7: All
Section 8: All
Section 9: All
Section 10: All
Section 11: All
Section 12: All
Section 13: N½
Section 14: N½
Section 15: All
Section 16: All

[1] The north-half of Sections 13 and 14 comprise lay-down 320-acre drilling units.

Section 17: All
Section 18: All

(containing 10,884 acres, more or less)

These lands are hereinafter referred to as the "Spaced Lands."

6. The interval spaced in the Spaced Lands is described as being from the surface down to the top of the Mancos formation and includes the Green River, Wasatch, Mesa Verde, and Castlegate formations ("Spaced Interval"). The Order ultimately provided for one well to produce from the Spaced Interval in each drilling unit.

7. Under the Order, the Board established a uniform spacing pattern in the Spaced Lands and Spaced Interval authorizing the legal location for unit wells at the center of the NW¼ and SE¼ of each governmental survey section or its equivalent, excepting only the N½ of Sections 13 and 14 where the permitted location is authorized at the center of the NW¼ or its equivalent, and further permitting a tolerance of 600 feet from the center of such designated quarter-sections.

8. Snyder owns or controls 9,591 of the 10,844 acres comprising the Spaced Lands and is the predominant owner of working interests in the Spaced Lands and Spaced Interval.

9. Snyder or its predecessors have successfully drilled, tested, and produced wells at legal locations in the drilling units; and 20 wells are currently capable of production from the Spaced Interval ("Existing Wells").

10. Snyder is the operator of 19 of the Existing Wells, and Chevron U.S.A. Inc. is the operator of the remaining Existing Well.

11. The productive horizons are the Wasatch and Mesaverde formations, comprising continental deposits including channel sandstones, siltstones, and shales deposited by aggrading streams flowing northwesterly into the Uinta Basin. The lenticular channel sandstones form the common source of supply where the hydrocarbons are stratigraphically trapped in their updip pinchout.

12. The Spaced Interval thicknesses across the Spaced Lands range from 3, 950 to 4,350 feet, with the productive Wasatch and Mesaverde formations ranging in thickness from 20 feet to 70 feet in channels less than one-half mile wide.

13. Geologic and engineering data obtained from drilling and development operations on the Spaced Lands and in the Spaced Interval, related technical studies within the same geologic provenance and formations in adjoining lands containing the identical horizons, and the position of the existing producing wells confirms that one well drilled in legal locations in the drilling units does not drain the common source of supply in the Spaced Interval. The beds have insufficient thickness or have limiting characteristics precluding effective and efficient drainage of the recoverable reserves from the common source of supply.

14. Many of the productive beds are not correlatable from well to well and will not afford communication between wells located 1,000 feet apart.

15. The surface of the Spaced Lands exhibits severe topographic relief consisting of high mesas and steep canyons incised and dissected by the White River and its tributaries. Appropriate locations for oil and gas drilling operations are radically limited, justifying larger than usual drilling windows defined by setbacks of 330 feet from the drilling unit boundary (quarter-section lines) for interior drilling units to accommodate drilling.

16. Archeological and environmental considerations further limit the number of adequate drilling locations in the Spaced Lands.

17. The Spaced Lands are bounded on three sides by federal exploratory units necessitating 500-foot setbacks from the exterior boundaries of the Spaced Lands.

18. By allowing administrative approval for exception wells for topographic, archaeologic, and environmental reasons and when the landowners impose "no surface occupancy" stipulations upon the lease or similar conditions upon the permits to drill (without limitation to a footage tolerance), Snyder will be able to select appropriate locations even at the exterior boundaries of the Spaced Lands.

19. All existing wells conform to the existing spacing pattern and to the spacing pattern established in this Order.

20. Snyder proposes to drill wells to the Spaced Interval at the following potential locations in the Spaced Lands:

SW¼ Section 4-10S-23E
NE¼ Section 4-10S-23E

NW¼ Section 8-10S-23E
SE¼ Section 8-10S-23E
SW¼ Section 9-10S-23E
SE¼ Section 9-10S-23E
NW¼ Section 10-10S-23E
SW¼ Section 10-10S-23E
NE¼ Section 16-10S-23E
SW¼ Section 11-10S-23E

These wells would constitute legal locations under the Order as modified.

21. At the hearing, Snyder orally modified its Request for Agency Action to apply to, and embrace, all formations spaced under the Order; and further, orally modified its Request for Agency Action to provide setbacks for the drilling windows of 500 feet from the exterior boundary of the Spaced Lands.

CONCLUSIONS OF LAW

1. The Board has jurisdiction of the parties and of the subject matter of Snyder's Request for Agency Action, pursuant to Chapter 6 of Title 40 of the *Utah Code Annotated* and pursuant to the Order; and has the authority to make and promulgate the order hereinafter set forth.

2. The Board has authority to modify its previous Order to permit additional wells to be drilled within established units pursuant to section 40-6-6(4) of the *Utah Code Annotated*.

3. The Board gave due and regular notice of the time, place, and purpose of the hearing to all interested parties as required by law and by the rules and regulations of the Board.

4. Snyder's petition poses an appropriate request for modification of the existing Order to authorize infill drilling under Utah law.

5. A 330-foot setback from the exterior boundary of all interior drilling units and a 500-foot setback from the exterior boundary of the Spaced Lands will prevent waste of the resource in the common source of supply by allowing Snyder to drill at surface locations not otherwise available.

6. Drilling at the locations as modified will prevent the drilling of unnecessary wells, and therefore economic waste, inasmuch as Snyder will be able to intersect productive sands not otherwise accessible from the existing legal locations.

7. Modifying the existing Order to authorize the drilling of a second production well within the established drilling units will protect the correlative rights of owners who have participated in the drilling of existing wells.

8. Based upon the known geologic and engineering data, modification of the existing Order to authorize production from a second well in the Spaced Interval within the 320-acre drilling units will promote the development, production, and utilization of oil and gas within the Spaced Interval in such a manner as to achieve the greatest ultimate recovery.

ORDER

IT IS THEREFORE ORDERED that to prevent waste of the oil, gas, and associated hydrocarbons, to increase the ultimate recovery of the resource, to prevent physical and economic waste, and to protect correlative rights:

A. Snyder's Request for Agency Action, as orally amended at the hearing to include all existing formations within the Spaced Interval, is granted.

B. The Order in Cause No. 179-1 is hereby modified to authorize the drilling of a second production well from the Spaced Interval in the existing drilling units at locations hereinafter defined.

C. Wells shall be drilled no closer than 1,000 feet from the nearest well producing from the Spaced Interval.

D. The legal location for second wells within the existing drilling units shall be near the center of each governmental survey quarter-section or its equivalent, within a drilling unit described as follows:

> **For Interior Drilling Units:** by setbacks of no less than 330 feet from the existing exterior boundary of each interior drilling unit.
>
> **For Exterior Drilling Units:** by setbacks of no less than 330 feet on the three interior sides of the drilling unit and by no less than 500 feet on the exterior side of the drilling unit for those drilling units comprising the exterior drilling units of the Spaced Lands.

E. The Division may grant administrative approval for exception wells for topographic, archaeologic, and environmental reasons and when the landowners impose "no surface occupancy" stipulations to the leases or "no surface occupancy" conditions to the permits to drill, without limitation as to footage from legal locations under his order.

F. The Board retains exclusive and continuing jurisdiction of all matters covered by this order and of all parties affected thereby; and specifically, the Board retains and reserves exclusive and continuing jurisdiction to make further orders as appropriate and authorized by statute and applicable regulations.

ENTERED this 27th day of May, 1994.

STATE OF UTAH
BOARD OF OIL, GAS AND MINING

Dave D. Lauriski
Chairman

Form 3160-3
(July 1992)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

FORM APPROVED
OMB NO. 1004-0136
Expires: February 28, 1995

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK
DRILL [X] DEEPEN [ ]

b. TYPE OF WELL
OIL WELL [ ] GAS WELL [X] OTHER SINGLE ZONE [ ] MULTIPLE ZONE [X]

2. NAME OF OPERATOR
Snyder Oil Corporation Phone: (303) 592-8500

3. ADDRESS AND TELEPHONE NO.
1625 Broadway, Suite 2200; Denver, Colorado 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface
1625' FSL, 2200' FEL ($SW\frac{1}{4}NW\frac{1}{4}SE\frac{1}{4}$) Section 8, T10S, R23E
At proposed prod. zone
Same as above.

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
Approximately ten (10) miles southwest of Bonanza, Utah

5. LEASE DESIGNATION AND SERIAL NO.
UTU-37355

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
Not Applicable

7. UNIT AGREEMENT NAME
Not Applicable

8. FARM OR LEASE NAME, WELL NO.
Southman Canyon 8-4-J

9. API WELL NO.

10. FIELD AND POOL, OR WILDCAT
Southman Canyon

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Section 8, T10S, R23E

12. COUNTY OR PARISH: Uintah
13. STATE: Utah

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)	16. NO. OF ACRES IN LEASE	17. NO. OF ACRES ASSIGNED TO THIS WELL
1625'	1920.00	160
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	**19. PROPOSED DEPTH**	**20. ROTARY OR CABLE TOOLS**
1950' ±	8365'	Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
5331' GR

22. APPROX. DATE WORK WILL START*
October 1, 1994

23. PROPOSED CASING AND CEMENTING PROGRAM (All New)

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	8-5/8" J-55	24.0#	0- 400'	300 sx circulated to surface *
7-7/8"	4-1/2" M-75	11.6#	0-8365'	1550 sx cement *

* Cement volumes may change due to hole size. Calculate from Caliper Log.

EIGHT-POINT RESOURCE PROTECTION PLAN ATTACHED.

RECEIVED
AUG - 8 1994
DIV. OF OIL, GAS & MINING

I hereby certify that Snyder Oil Corporation is authorized by the proper Lease Interest Owners to conduct lease operations associated with this Application for Permit to Drill the Southman Canyon Federal #8-4-J, Federal Lease #UTU-37355. Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by Snyder Oil Corporation, Nationwide Bond #WY-2272, who will be responsible for compliance with all the terms and conditions of that portion of the lease associated with this Application.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.
SIGNED Tim A. Burns TITLE Drilling Engineer DATE August 4, 1994
Tim A. Burns

(This space for Federal or State office use)

PERMIT NO. 43-047-32542 APPROVAL DATE

APPROVED BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING
DATE: 9/20/94
BY: [signature]
WELL SPACING: Cause 179-6

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

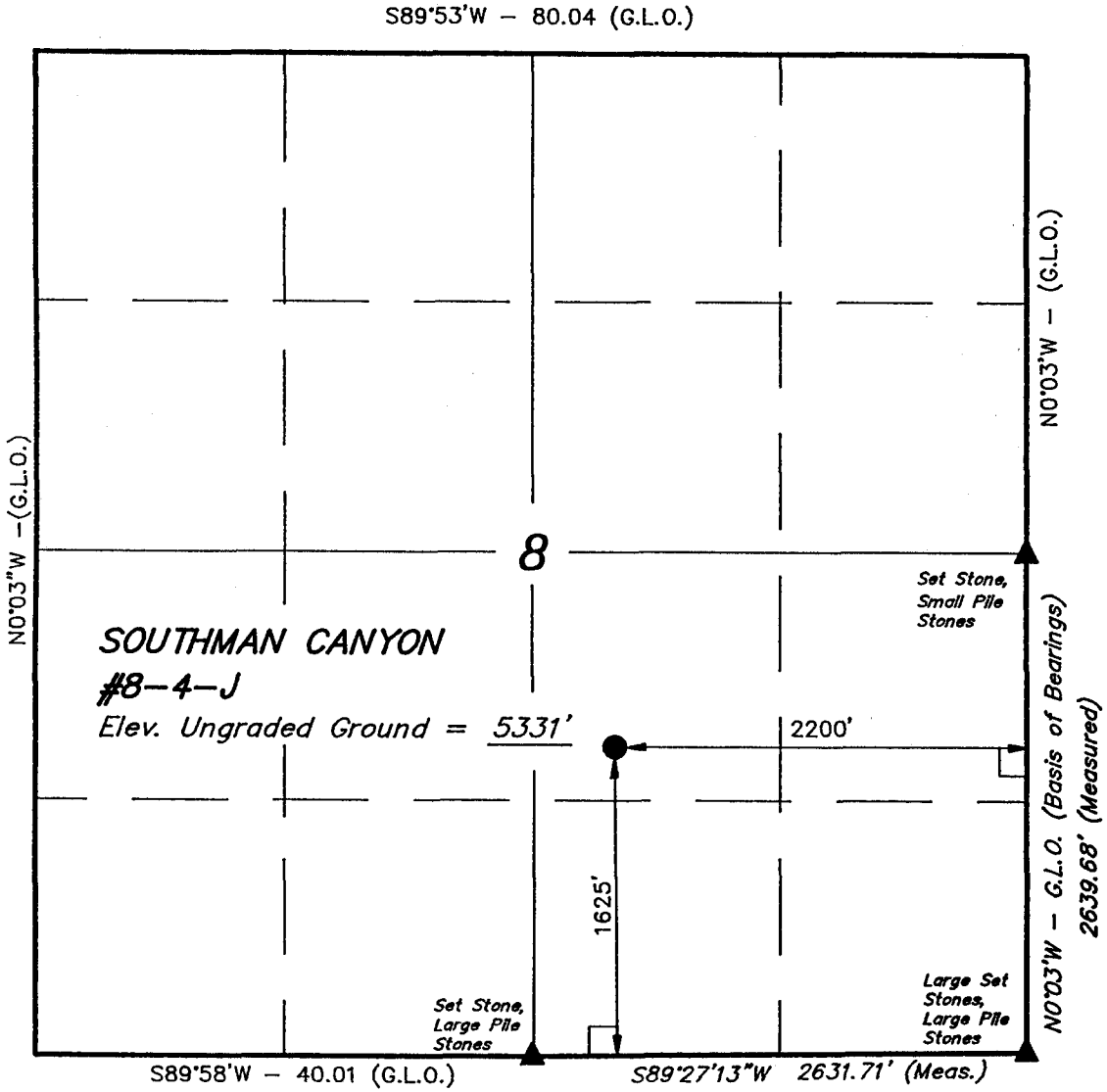
CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY _____ TITLE _____ DATE _____

*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

T10S, R23E, S.L.B.&M.



LEGEND:

└ = 90° SYMBOL

● = PROPOSED WELL HEAD.

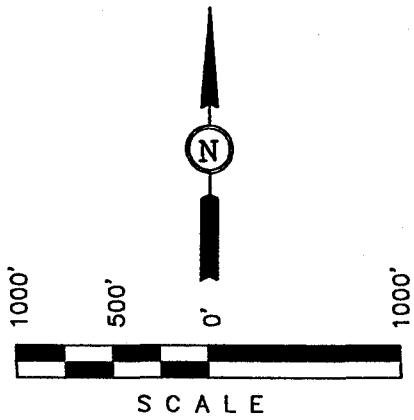
▲ = SECTION CORNERS LOCATED.

SNYDER OIL CORP.

Well location, SOUTHMAN CANYON #8–4–J, located as shown in the NW 1/4 SE 1/4 of Section 8, T10S, R23E, S.L.B.&M. Uintah County Utah.

BASIS OF ELEVATION

BENCH MARK 57 EAM LOCATED IN THE NE 1/4 OF SECTION 29, T9S, R23E, S.L.B.&M. TAKEN FROM THE RED WASH SE. QUADRANGLE, UTAH, UINTAH COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 5192 FEET.



CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR
REGISTRATION NO. 161319
STATE OF UTAH

UINTAH ENGINEERING & LAND SURVEYING
85 SOUTH 200 EAST – VERNAL, UTAH 84078
(801) 789–1017

SCALE: 1" = 1000'	DATE SURVEYED: 4–18–94	DATE DRAWN: 5–12–94
PARTY: B.B. S.D. D.R.B.	REFERENCES: G.L.O. PLAT	
WEATHER: COLD	FILE: SNYDER OIL CORP.	

SNYDER OIL CORPORATION
Lease #UTU-37355, Southman Canyon #8-4-J
SW¼NW¼SE¼, Section 8, T10S, R23E
Uintah County, Utah

DRILLING PROGNOSIS

1. ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS

Uinta	Surface	Mesaverde	5920'
Green River	815'	Buck Tongue	8340'
Wasatch	4081'	Total Depth	8365'

2. ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS OR MINERAL FORMATIONS

Green River	815'	Water	(Possible)
Wasatch	4081'	Gas	(Primary Objective)
Mesaverde	5920'	Gas	(Primary Objective)

Any shallow water zones encountered will be adequately protected and reported. All potentially productive hydrocarbon zones will be cemented off.

3. PRESSURE CONTROL EQUIPMENT - Schematic Attached

A. Type: Eleven (11) Inch Double Gate Hydraulic BOP with Eleven (11) Inch Annular Preventer and 3,000 psi wellhead.

The Blow-Out Preventer will be equipped as follows:

1. One (1) blind ram (above).
2. One (1) pipe ram (below).
3. Drilling spool with two (2) side outlets (choke side 3-inch minimum, kill side 2-inch minimum).
4. Kill line (2-inch minimum).
5. Two (2) kill line valves, one of which will be a check valve (2-inch minimum).
6. 3-inch (minimum) choke line.
7. Two (2) choke line valves (3-inch minimum).
8. Two (2) adjustable chokes.
9. Pressure gauge on choke manifold.
10. Upper kelly cock valve with handle available.
11. Full opening internal blowout preventer or drill pipe safety valve able to fit all connections.
12. Fill-up line above the uppermost preventer.

B. Pressure Rating: 3,000 psi

3. PRESSURE CONTROL EQUIPMENT - Continued

C. Testing Procedure:

Annular Preventer

At a minimum, the Annular Preventer will be pressure tested to 50% of the rated working pressure for a period of ten (10) minutes or until provisions of the test are met, whichever is longer.

At a minimum, the above pressure test will be performed:

1) when the annular preventer is initially installed;
2) whenever any seal subject to test pressure is broken;
3) following related repairs; and
4) at thirty (30) day intervals.

In addition to the above, the annular preventer will be functionally operated at least weekly.

Blow-Out Preventer

At a minimum, the BOP, choke manifold, and related equipment will be pressure tested to the approved working pressure of the BOP stack (if isolated from the surface casing by a test plug) or to 70% of the internal yield strength of the surface casing (if the BOP is not isolated from the casing by a test plug). Pressure will be maintained for a period of at least ten (10) minutes or until the requirements of the test are met, whichever is longer.

At a minimum, the above pressure test will be performed:

1) when the BOP is initially installed;
2) whenever any seal subject to test pressure is broken;
3) following related repairs; and
4) at thirty (30) day intervals.

In addition to the above, the pipe and blind rams will be activated each trip, but not more than once each day.

All blowout preventer drills and tests will be recorded in the International Association of Drilling Contractors (IADC) driller's log.

3. **PRESSURE CONTROL EQUIPMENT** - Continued

D. Choke Manifold Equipment:

All choke lines will be straight lines unless turns use tee blocks or are targeted with running tees, and will be anchored to prevent whip and vibration.

E. Accumulator:

The accumulator will have sufficient capacity to open the hydraulically-controlled choke line valve (if so equipped), close all rams plus the annular preventer, and retain a minimum of 200 psi above precharge on the closing manifold without the use of the closing unit pumps. The fluid reservoir capacity will be double the accumulator capacity and the fluid level will be maintained at the manufacturer's recommendations.

The BOP system will have two (2) independent power sources to close the preventers. Nitrogen bottles (3 minimum) will be one (1) of these independent power sources and will maintain a charge equal to the manufacturer's specifications.

The accumulator precharge pressure test will be conducted prior to connecting the closing unit to the BOP stack and at least once every six (6) months thereafter. The accumulator pressure will be corrected if the measured precharge pressure is found to be above or below the maximum or minimum limits specified in *Onshore Oil & Gas Order Number 2*.

F. Special Drilling Operations:

In addition to the equipment already specified in Items A through E, above, the following equipment will be in place and operational during air/gas drilling:

1. Properly lubricated and maintained rotating head.
2. Spark arresters on engines or water cooled exhaust.
3. Blooie line discharge 100 feet from well bore and securely anchored.
4. Straight run on blooie line.
5. Deduster equipment (not required for aerated water system).
6. All cuttings and circulating medium(s) shall be directed into a reserve or blooie pit.
7. Float valve above bit.

3. PRESSURE CONTROL EQUIPMENT

F. Special Drilling Operations: Continued

8. Automatic igniter or continuous pilot light on the blooie line (not required for aerated water system).
9. Compressors located in the opposite direction from the blooie line and at a minimum of 100 feet from the well bore.
10. Mud circulating equipment, water, and mud materials (does not have to be pre-mixed) sufficient to maintain the capacity of the hole and circulating tanks or pits.

G. Miscellaneous Information:

The Blow-Out Preventer and related pressure control equipment will be installed, tested and maintained in compliance with the specifications in and requirements of *Onshore Oil & Gas Order Number 2*.

The choke manifold and BOP extension rods with hand wheels will be located outside the rig sub-structure. The hydraulic BOP closing unit will be located at least twenty-five (25) feet from the well head but readily accessible to the driller. Exact locations and configurations of the hydraulic BOP closing unit will depend upon the particular rig contracted to drill the Southman Canyon #8-4-J.

A flare line will be installed after the choke manifold, extending 125 feet (minimum) from the center of the drill hole to a separate flare pit.

4. THE PROPOSED CASING AND CEMENTING PROGRAM

A. Casing Program: All New

Hole Size	Casing Size	Wt./Ft.	Grade	Joint	Depth Set
20 "	16 "	Steel	----	----	0- 60'[1]
12-1/4"	8-5/8"	24.0#	J-55	ST&C	0- 400'[2]
7-7/8"	4-1/2"	11.6#	M-75	LT&C	0-8365'[2]

[1] Conductor optional.

4. THE PROPOSED CASING AND CEMENTING PROGRAM

A. Casing Program: Continued

[2] Minimum design factors:

collapse	= 1.125	tension (joint)	= 1.800
burst	= 1.000	tension (pipe body)	= 1.500

The surface casing will have centralizers on the bottom three (3) joints joint of casing, with a minimum of one (1) centralizer per joint starting with the shoe joint.

Casing string(s) will be pressure tested to 0.22 psi/foot of casing string length or 1500 psi, whichever is greater (not to exceed 70% of the internal yield strength of the casing), after cementing and prior to drilling out from under the casing shoe.

B. Cementing Program:

Surface Conductor - Set with approximately five (5) cubic yards (yd^3) of Redi-Mix cement, circulated back to surface.

Surface Casing - Set with approximately 300 sx of Class "G" cement, circulated back to surface.

Production Casing - *Lead* with approximately 1050 sx Halliburton "Light" cement.

Tail with approximately 500 sx Class "G" (or 50/50 Poz-Mix) cement, as applicable.

A sufficient quantity of tail cement will be utilized to achieve full coverage across the Mesaverde Formation. Estimated top of cement ≈ 3881'.

The above cement volumes are approximate and were calculated under the assumption that a gauge hole will be achieved. Actual cement volumes may vary due to variations in the actual hole size and will be determined by running a caliper log on the drilled hole.

4. THE PROPOSED CASING AND CEMENTING PROGRAM

B. Cementing Program: Continued

All waiting on cement (WOC) times will be adequate to achieve a minimum of 500 psi compressive strength at the casing shoe prior to drilling out.

5. MUD PROGRAM - Visual Monitoring

Interval	Type	Weight	Viscosity	Fluid Loss
0- 400'	Fresh Water/Gel	8.8- 9.2	28-35	No Control
400-8365'	Aerated Brine	8.2- 8.8	30-35	+ 25 cc's
As Needed[1]	Salt Water/Gel	9.8-10.5	35-45	15-25 cc's

[1] The drilling fluids system will consist of air/mist (with brine water as the base fluid) for as long and/or as deep as possible. Should hole conditions deteriorate prior to reaching total depth, an alternative drilling fluids system would be utilized consisting of a salt/gel mud (with brine water as the base fluid).

Sufficient mud material(s) to maintain mud properties, control lost circulation and contain a blowout will be available at the well site during drilling operations.

No chromate additives will be used in the mud system on Federal or Indian lands without prior approval of the Bureau of Land Management in order to ensure adequate protection of fresh water aquifers.

Hazardous substances specifically listed by the Environmental Protection Agency as a hazardous waste or demonstrating a characteristic of a hazardous waste will not be used in drilling, testing or completion operations.

6. EVALUATION PROGRAM

Logs : DLL/SP/GR[1] - from 8365' to 400'
FDC/CNL/SP/GR[1] - from 8365' to 400'

[1] Pull Gamma Ray to surface.

DST's : None anticipated.

Cores : None anticipated.

6. EVALUATION PROGRAM - Continued

The proposed Evaluation Program may change at the discretion of the well site geologist, with prior approval from the Authorized Officer, Bureau of Land Management.

Stimulation : No stimulation or frac treatment has been formulated for this test at this time. The drill site, as approved, will be of sufficient size to accommodate all completion activities.

Whether the well is completed as a dry hole or as a producer, *Well Completion and Recompletion Report and Log* (Form #3160-4) will be submitted to the Vernal District Office not later than thirty (30) days after the completion of the well or after completion of operations being performed, in accordance with 43 CFR 3164.

Two (2) copies of all logs, core descriptions, core analyses, well test data, geologic summaries, sample description, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, will be filed with Form #3160-4. Samples (cuttings, fluids, and/or gases) will be submitted when requested by the Authorized Officer, Vernal District Office, Bureau of Land Management, 170 South 500 East, Vernal, Utah 84078, Telephone: (801) 789-1362.

7. ABNORMAL CONDITIONS

No abnormal temperatures or pressures are anticipated. No H_2S has been encountered in or known to exist from previous wells drilled to similar depths in the general area.

Maximum anticipated bottom hole pressure equals approximately 4,100 psi (as calculated in the Downspacing Hearing Study) and maximum anticipated surface pressure equals approximately 2260 psi (bottom hole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot of hole).

8. ANTICIPATED STARTING DATES AND NOTIFICATION OF OPERATIONS

A. Anticipated Starting Dates:

Anticipated Commencement Date	-	October 1, 1994
Drilling Days	-	Approximately 14 Days
Completion Days	-	Approximately 10 days

8. ANTICIPATED STARTING DATES AND NOTIFICATION OF OPERATIONS

B. Notification of Operations:

Vernal District Office, Bureau of Land Management

Address : 170 South 500 East; Vernal, Utah 84078
Phone : (801) 789-1362
Fax : (801) 789-3634

In the event after-hours approvals are necessary, please contact one of the following individuals:

Contact Title	Contact Name	Home Phone
Petroleum Engineer	Gerald E. Kenczka	(801) 781-1190
Petroleum Engineer	Ed Forsman	(801) 789-7077

The Vernal District Office, Bureau of Land Management will be notified at least twenty-four (24) hours ***PRIOR*** to the commencement of the following activities:

1. Spudding of the well. This oral report will be followed up with a Sundry Notice (Form 3160-5);

2. initiating pressure tests of the blow-out preventer and related equipment;

3. running casing and cementing of ALL casing strings.

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR, Part 3160), and this approved Application for Permit to Drill. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved Application for Permit to Drill must be on location during construction, drilling and completion operations. The following items are emphasized:

DRILLING/PRODUCING OPERATING STANDARDS

There shall be no deviation from the proposed drilling and/or workover program as approved. Safe drilling and operating practices must be observed.

8. ANTICIPATED STARTING DATES AND NOTIFICATION OF OPERATIONS

B. Notification of Operations: Continued

All wells, whether drilling, producing, suspended or abandoned shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, the lease serial number, the well number and the surveyed description of the well.

Any changes in operations must have prior approval from the Authorized Officer (AO), Vernal District Office, Bureau of Land Management.

Pressure tests are required before drilling out from under all casing strings set and cemented in place. Blowout preventer controls will remain in use until the well is either completed or abandoned. Preventers will be inspected and operated at least daily to insure good mechanical working order, and this inspection will be recorded on the daily drilling report. All BOP tests must be recorded in the daily drilling report. ***NOTIFY RESOURCE AREA PETROLEUM ENGINEER AT LEAST TWENTY-FOUR (24) HOURS IN ADVANCE OF PRESSURE TESTS.***

In accordance with *Onshore Oil & Gas Order Number 1*, this well will be reported on MMS Form #3160-6, *Monthly Report of Operations and Production*, starting with the month in which operations commence and continuing each month until the well is physically plugged and abandoned. This report will be filed directly with the Royalty Management Program, Minerals Management Service, P.O. Box 17110, Denver, Colorado 80217.

All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL-3A will be reported to the Vernal District Office. Major events will be reported verbally within twenty-four (24) hours and will be followed with a written report within fifteen (15) days. "Other than Major Events" will be reported in writing within fifteen (15) days. "Minor Events" will be reported on the *Monthly Report of Operations and Production* (Form #3160-6)

No well abandonment operations will be commenced without the prior approval of the Authorized Officer. In the case of newly-drilled dry holes or failures, and in emergency situations, oral approval will be obtained from the Area Petroleum Engineer.

8. ANTICIPATED STARTING DATES AND NOTIFICATION OF OPERATIONS

B. Notification of Operations: Continued

A *Notice of Intention to Abandon* (Form #3160-5) will be filed with the Authorized Officer within fifteen (15) days following the granting of oral approval to plug and abandon.

Upon completion of approved plugging, a regulation marker will be erected in accordance with 43 CFR 3162.6 The following information will be permanently placed on the marker with a plate, cap, or beaded-on with a welding torch: Company Name, Well Name and Number, Location by Quarter/Quarter, Section, Township, Range, and the Federal Lease Number.

A *Subsequent Report of Abandonment* (Form #3160-5) will be submitted within thirty (30) days following the actual plugging of the well bore. This report will indicate where plugs were placed and the current status of surface restoration operations. If surface restoration has not been completed at that time, a follow-up report on Form #3160-5 will be filed when all surface restoration work has been completed and the location is considered ready for final inspection.

Pursuant to NTL-4A, lessees and operators are authorized to vent/flare gas during initial well evaluation tests, not exceeding a period of thirty (30) days or the production of fifty (50) MMCF of gas, whichever occurs first. An application must be filed with the Authorized Officer, and approval received, for any venting/flaring of gas beyond the initial thirty (30) day or otherwise authorized test period.

Not later than the 5th business day after any well begins production on which royalty is due anywhere on a lease site or allocated to a lease site, or resumes production in the case of a well which has been off production for more than ninety (90) days, the operator shall notify the Authorized Officer by letter or *"Sundry Notice"*, of the date on which such production has begun or resumed. The notification shall provide as a minimum, the following informational items:

a. Operator name, address, and telephone number
b. Well name and number
c. Well location "¼, ¼, Section, Township, Range, P.M."

8. ANTICIPATED STARTING DATES AND NOTIFICATION OF OPERATIONS

B. Notification of Operations:

The notification shall provide as a minimum, the following informational items: continued

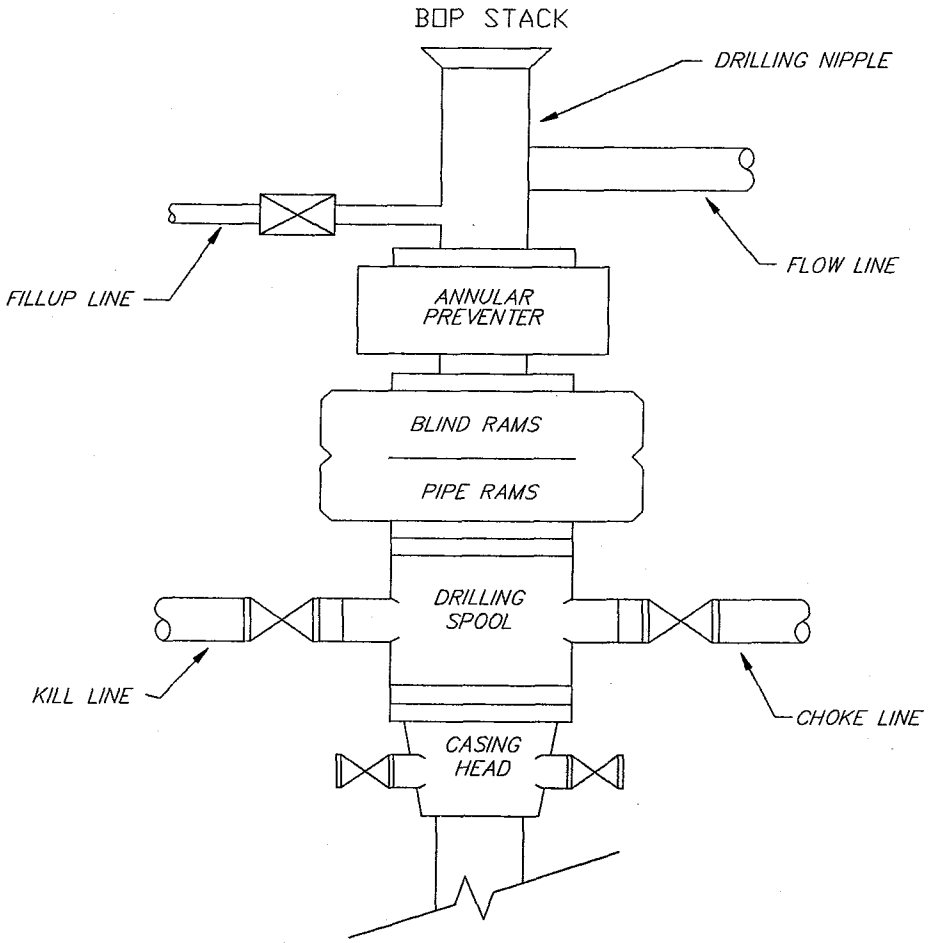
d. Date well was placed in a producing status
e. The nature of the wells production, i.e.: crude oil casing gas, or natural gas and entrained liquid hydrocarbons.
f. The OCS, Federal or Indian lease prefix and number on which the well is located. Otherwise, the non-Federal or non-Indian land category, ie.: state or private.

Within sixty (60) days following construction of a new tank battery, a site facility diagram of the battery showing actual conditions and piping must be submitted to the Authorized Officer. Facility diagrams shall be filed within sixty (60) days after existing facilities are modified. For complete information as to what is required on these diagrams, please refer to 43 CFR 3162.7-4(d).

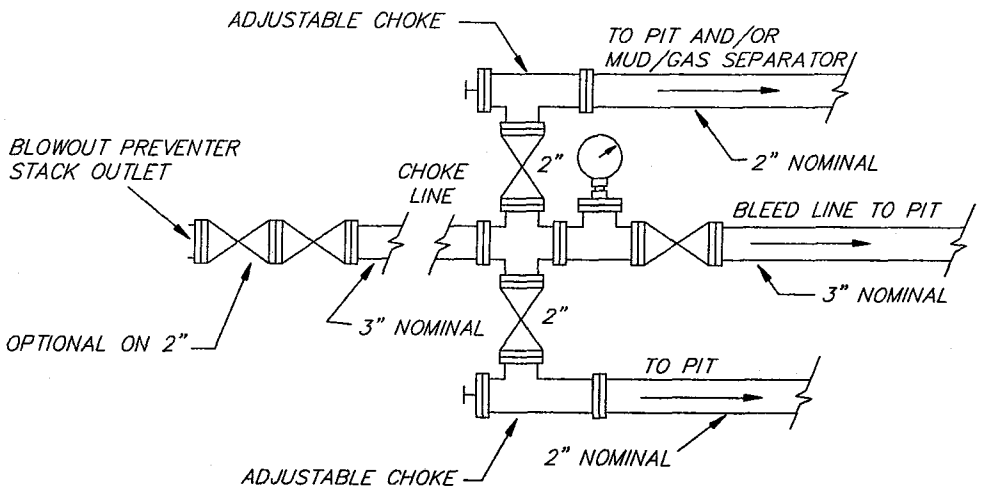
Pursuant to *Onshore Oil & Gas Order Number 1*, lessees and operators have the responsibility to see that their exploration, development, production, and construction operations are conducted in such a manner which conforms with applicable federal laws and regulations and with state and local laws and regulations to the extent that such State and local laws are applicable to operations on Federal and Indian lands.

SNYDER OIL CORPORATION

TYPICAL 3,000 p.s.i.
BLOWOUT PREVENTER SCHEMATIC



TYPICAL 3,000 p.s.i.
CHOKE MANIFOLD SCHEMATIC



SNYDER OIL CORPORATION
Lease #UTU-37355, Southman Canyon #8-4-J
SW¼NW¼SE¼, Section 8, T10S, R23E
Uintah County, Utah

MULTI-POINT SURFACE USE AND OPERATIONS PLAN

1. **EXISTING ROADS** - Refer to Maps "A" and "B" (shown in ORANGE)

   A. The proposed well site is staked and four (4) 200-foot reference stakes are present.
   B. To reach the location from the city of Vernal, Utah; proceed generally east and south approximately 3.0 miles on U.S. Highway 40 (a paved U.S. Highway), thence generally south/southeast approximately 35 miles to the community of Bonanza on Utah Highway 45 (a paved state highway), thence generally west approximately 3.9 miles on an existing Uintah County Road (crowned & ditched with a gravel surface), thence generally southwest approximately 1.3 miles on an existing Uintah County road (crowned & ditched with a gravel surface), thence generally west/southwest approximately 8.4 miles on an existing oilfield road (crowned & ditched with a native soil surface), thence generally southeast approximately 0.1 mile on an existing oilfield road (crowned and ditched with a native soil surface), thence generally east approximately 0.6 miles to the proposed Southman Canyon #8-4-J well location.
   C. Access roads - refer to Maps "A" and "B".
   D. Access roads within a one (1) mile radius - refer to Map "B".
   E. The existing roads will be maintained in the same or better condition as existed prior to the commencement of operations and said maintenance will continue until final abandonment and reclamation of the Southman Canyon #8-4-J well location.

2. **PLANNED ACCESS ROADS** - Refer to Map "B" (shown in GREEN)

   Approximately 0.6 miles of new road construction will be required for access to the proposed Southman Canyon #8-4-J well location.

   A. Width - maximum thirty (30) foot overall right-of-way with an eighteen (18) foot running surface, crowned and ditched for drilling and completion operations.
   B. Construction standard - the proposed access road will be constructed in accordance with roading guidelines established for oil & gas exploration and development activities as referenced in the joint BLM/USFS publication: *Surface Operating Standards for Oil and Gas Exploration and Development*, Third Edition.

2. PLANNED ACCESS ROADS - Continued

B. Construction standard - the access road will be designed and constructed to meet the standards of the anticipated traffic flow and all-weather requirements. Construction will include ditching, draining, graveling, crowning, and capping the roadbed as necessary to provide a well constructed and safe roadway.

Prior to construction/upgrading, the roadway shall be cleared of any snow cover and allowed to dry completely.

Traveling off of the thirty (30) foot right-of-way will not be allowed.

Drainage crossings shall be of the typical dry creek drainage crossing type. Crossings shall be designed so they will not cause siltation or the accumulation of debris in the drainage crossing nor shall the drainages be blocked by the roadbed. Erosion of drainage ditches by runoff water shall be prevented by diverting water off at a frequent intervals by means of cutouts.

Upgrading shall not be allowed during muddy conditions.

Should mud holes develop, they shall be filled in and detours around them avoided.

C. Maximum grade - 7%.

D. Turnouts - turnouts will be constructed along the access road route as necessary or required to allow for the safe passage of traffic. None anticipated for this short segment of new access road.

E. Drainage design - the access road will be upgraded and maintained as necessary to prevent soil erosion and accommodate all-weather traffic. The proposed road will be crowned and ditched with water turnouts installed as necessary to provide for proper drainage along the access road route.

F. Culverts, cuts and fills - no culverts will be required along the access road route. There are no major cuts and/or fills on/along the proposed access road route.

G. Surfacing material - any construction materials which may be required for surfacing of the access road will be purchased from a local contractor having a permitted source of materials within the general area, if required by the Authorized Officer, Bureau of Land Management.

None anticipated at this time.

2. PLANNED ACCESS ROADS - Continued

H. Gates, cattleguards or fence cuts - no gates, cattleguards or fence cuts will be required on/along the proposed access road route.

I. Road maintenance - during both the drilling and production phase of operations, the road surface and shoulders will be kept in a safe and useable condition and will be maintained in accordance with the original construction standards.

All drainage ditches will be kept clear and free-flowing, and will also be maintained in accordance with the original construction standards.

The access road right-of-way will be kept free of trash during all operations.

J. The proposed access road route has been centerline staked.

3. LOCATION OF EXISTING WELLS WITHIN A ONE-MILE RADIUS

Please Refer to Map "C".

A. Water wells - none known.
B. Abandoned wells - C SW¼, Section 8, T10S, R23E.
C. Temporarily abandoned wells - none known.
D Disposal wells - none known.
E. Drilling wells - none known.
F. Producing wells - NW¼SE¼, Section 7, T10S, R23E.
SW¼NE¼, Section 8, T10S, R23E.
NE¼NW¼, Section 9, T10S, R23E.
C NW¼, Section 16, T10S, R23E.
NE¼NW¼, Section 17, T10S, R23E.
G. Shut-in wells - none known.
H. Injection wells - none known.
I. Monitoring wells - none known.

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES OWNED BY SNYDER OIL CORPORATION WITHIN A ONE (1) MILE RADIUS

A. Existing

1. Tank batteries - NW¼SE¼, Section 7, T10S, R23E.
SW¼NE¼, Section 8, T10S, R23E.
NE¼NW¼, Section 9, T10S, R23E.
NE¼NW¼, Section 17, T10S, R23E.
2. Production facilities - same as Item #4A1, above.

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES OWNED BY SNYDER OIL CORPORATION WITHIN A ONE (1) MILE RADIUS

A. Existing - Continued

3. Oil gathering lines - none known.
4. Gas gathering lines - same as Item #4A1, above.

B. New Facilities Contemplated

1. All production facilities will be located on the disturbed portion of the well pad and at a minimum of twenty (20) feet from the toe of the back slope or top of the fill slope.

2. Should drilling result in the establishment of commercial production from the Southman Canyon #8-4-J well location, production facilities will require an area approximately 250' X 125'.

   A diagram showing the proposed production facility layout will be submitted to the Authorized Officer via *"Sundry Notice"* (Form 3160-5) for approval ***prior*** to commencement of installation operations.

3. Production facilities will be accommodated on the disturbed portion of the well pad. Construction materials needed for installation of the production facilities will be obtained from the site; any additional materials needed will be purchased from a local supplier having a permitted source of materials in the general area.

   A dike will be constructed completely around those production facilities which are designed to hold fluids (e.g., condensate tanks and/or produced water tanks). These dikes will be constructed of compacted subsoil, be impervious, be designed to hold 100% of the capacity of the largest tank, and be independent of the back cut.

4. All permanent [on-site for six (6) months or longer] above-the-ground structures constructed or installed on the well location (including pumping units, tank batteries, etc.) will be painted a flat, non-reflective, earthtone color to match one of the standard environmental colors, as determined by the Five (5) State Rocky Mountain Interagency Committee.

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES OWNED BY SNYDER OIL CORPORATION WITHIN A ONE (1) MILE RADIUS

B. New Facilities Contemplated - Continued

4. All production facilities will be painted within six (6) months of installation. Facilities required to comply with *Occupational Safety and Health Act* Rules and Regulations will be excluded from this painting requirement.

   The required paint color is Carlsbad Canyon, Munsell standard color number 2.5Y 6/2.

5. If at any time the facilities located on public lands and authorized by the terms of the lease are no longer included in the lease (due to a contraction in the unit or other lease or unit boundary change), the Bureau of Land Management will process a change in authorization to the appropriate statute). The authorization will be subject to the appropriate rental or other financial obligation as determined by the Authorized Officer.

C. The production (emergency) pit will be fenced *"sheep-tight"* with woven wire mesh having two (2) top strands of barbed wire held in place by metal side posts and wooden corner "H" braces in order to protect livestock and wildlife (refer to Item 9F, page's 9 and 10).

D. During drilling and subsequent operations, all equipment and vehicles will be confined to the access road and any additional areas which may be specified in the approved Application for Permit to Drill.

E. Reclamation of disturbed areas no longer needed for operations will be accomplished by grading, leveling and seeding as recommended by the Authorized Officer, Bureau of Land Management.

5. LOCATION AND TYPE OF WATER SUPPLY

A. Fresh water for drilling will be obtained from an existing water well and reservoir: Uintah #1, owned by Target Trucking, Inc. and located in the SE¼SE¼NE¼ of Section 16, Township 10 South, Range 21 East, Uintah County, Utah; permit #49-991 (A57530).

5. LOCATION AND TYPE OF WATER SUPPLY - Continued

A. In the event this source of water proves inadequate, fresh water for use in drilling and cementing operations would be obtained from the municipal water supply for the city of Vernal, Utah.

B. Water will be transported via tank truck over existing roads from the point of diversion to the proposed Southman Canyon #8-4-J well location. No new road construction will be required on/along the proposed water haul route.

Access across any off-lease federal lands which may be crossed on/along the proposed water haul route will be secured under a separate right-of-way authorization to be issued by the Authorized Officer, Book Cliffs Resource Area Office, Bureau of Land Management.

C. No water well will be drilled on this location.

6. SOURCE OF CONSTRUCTION MATERIALS

A. Any construction materials which may be required for surfacing of the drill pad will be obtained from a private contractor having a previously approved (private) source of materials within the general area.

Please refer to Item 2G (page 2) for information regarding any construction materials which may be required for on the access road.

B. No construction materials will be taken from Federal or Indian lands without prior approval from the appropriate Surface Management Agency.

C. If production is established, any construction materials which may be required for surfacing of the access road and/or installation of production facilities will be purchased from a local supplier having a permitted (private) source of materials within the general area.

D. No new access roads for transportation of these construction materials will be required.

7. METHODS OF HANDLING WASTE MATERIALS

A. Cuttings - the drilled cuttings will be deposited in the reserve pit.

B. Drilling fluids - including any salts and/or chemicals utilized in the mud system will be contained in the reserve pit.

7. METHODS OF HANDLING WASTE MATERIALS - Continued

B. Drilling fluids - the reserve pit will be constructed so as not to leak, break, or allow discharge. Upon termination of drilling and completion operations, the liquid contents of the reserve pit will be removed and disposed of at an approved waste disposal facility within ninety (90) days after termination of drilling and completion activities.

In the event adverse weather conditions prevent removal of the fluids from the reserve pit within this time period, an extension may be granted by the Authorized Officer upon receipt of a written request from Snyder Oil Corporation.

C. Produced fluids - liquids produced during completion operations will either be placed in test tanks on the well location (when a gel frac system is used) or into the reserve pit (when a foam frac system is used). Produced water will be confined to a lined pit (reserve pit) for a period not to exceed ninety (90) days after initial well completion.

During this ninety (90) day period, in accordance with *Onshore Oil & Gas Order Number 7*, an application for approval of a permanent disposal method and location, along with the required water analysis, shall be submitted to the Authorized Officer for review and approval as applicable. Failure to file an application within the time frame allowed will be considered as an incidence of noncompliance.

Any spills of oil, gas, salt water or any other potentially hazardous substance will be cleaned up and immediately removed to an approved disposal site.

D. Sewage - portable, self-contained chemical toilets will be provided by Rocket Sanitation for human waste disposal. Upon completion of operations (or as required) the toilet holding tanks will be pumped and the contents thereof disposed of in an approved sewage disposal facility. Sewage disposal will be in strict accordance with applicable State of Utah rules and regulations regarding sewage treatment and disposal.

E. Garbage and other waste material - all garbage and non-flammable waste materials will be contained in a self contained, portable dumpster or trash cage.

7. METHODS OF HANDLING WASTE MATERIALS - Continued

E. Garbage and other waste material - upon completion of operations, or as needed, the accumulated trash will be hauled off-site to an approved sanitary landfill. No trash will be placed in the reserve pit.

F. Immediately after removal of the drilling rig, all debris and other waste materials not contained in the trash cage will be cleaned up and removed from the well location. No potentially adverse materials or substances will be left on the location.

Any open pits will be fenced during the drilling operation and said fencing will be maintained until such time as the pits have been backfilled.

G. Hazardous materials - Snyder Oil Corporation has no plans to utilize, store, transport or dispose of any chemical or chemicals listed on or subject to the Environmental Protection Agency's *Consolidated List of Chemicals Subject to Reporting Under Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986*, or any extremely hazardous substances, as defined in 40 CFR 355, on the Southman Canyon #8-4-J lease.

8. ANCILLARY FACILITIES

None anticipated.

9. WELLSITE LAYOUT

A. Figure #1 shows the drill site layout as staked. Cross sections have been drafted to visualize the planned cuts and fills across the proposed well location (refer to Figure #2).

A minimum of six (6) inches of topsoil will be stripped from the location (including areas of cut, fill, and/or subsoil storage) and stockpiled for future reclamation of the well site. Refer to Figure #1 for the location of the topsoil and subsoil stockpiles.

B. Figure #1 is a diagram showing a typical rig layout. No permanent living facilities are planned on the Southman Canyon #8-4-J well location. There will be a maximum of three (3) trailers on location during drilling operations, which will serve as both office and housing for the mud logger, geologist and toolpusher.

9. WELLSITE LAYOUT - Continued

C. All equipment and vehicles will be confined to the approved areas in this Application for Permit to Drill (i.e., access road and well pad areas).

D. A diagram showing the proposed production facility layout will be submitted to the Authorized Officer via *Sundry Notice* (Form 3160-5) for approval *prior* to the commencement of installation operations. Please refer to Item 4B2 (page 4) for additional information in this regard.

E. If porous subsoil materials (i.e., gravel, scoria, sand, faulted rock structures, etc.) are encountered during reserve pit construction, an impervious liner will be installed in order to prevent drilling water loss through seepage.

If required, this liner will have a permeability less than or equal to 1×10^{-7} cm/sec. The liner will be chemically compatible with all substances which may be put into the pit and will be installed so that it will not leak. Liners made of any man-made synthetic material will be of sufficient strength and thickness to withstand normal installation and pit use.

F. Prior to the commencement of drilling operations, the reserve pit will be fenced "sheep tight" on the three (3) non-working sides according to the following minimum standards (if/as required by the Authorized Officer):

1. 32-inch net wire shall be used with two (2) strands of barbed wire on top of (above) the net wire.

2. The net wire shall be no more than four (4) inches above the ground. The first strand of barbed wire shall be ≈ three (3) inches above the net wire. Total height of the fence shall be at least forty-two (42) inches.

3. Corner posts shall be cemented and/or braced in such a manner to keep the fence tight at all times.

4. Standard steel, wood, or pipe posts shall be used between the corner braces. The maximum distance between any two (2) posts shall be no greater than sixteen (16) feet.

5. All wire shall be stretched, by using a stretching device, before it is attached to the corner posts.

9. **WELLSITE LAYOUT** - Continued

F. The fourth (4*th*) side of the reserve pit will be fenced immediately upon removal of the drilling rig and the fencing will be maintained until the pit is backfilled.

G. Any hydrocarbons on the pit will be removed as soon as possible after drilling operations are completed.

10. **PLANS FOR RECLAMATION OF THE SURFACE**

A. Rat and mouse holes will be backfilled and compacted from bottom to top immediately upon release of the completion rig from the location.

B. If any oil is on the pits and is not immediately removed after operations cease, the pit containing the oil or other adverse substance(s) will be flagged overhead or covered with wire mesh to protect migrating waterfowl.

C. Producing Operations:

1. Immediately upon well completion, the well location and surrounding area(s) will be cleared of all debris, materials, trash and junk not required for production. Any hydrocarbons on the pit shall be removed in accordance with 43 CFR 3162.7-1.

2. If a plastic or nylon reinforced pit liner is used, it shall be torn and perforated before backfilling of the reserve pit.

3. Before any dirt work to restore the location takes place, the reserve pit will be completely dry and all cans, barrels, pipe, etc. will be removed. All other waste and spoil materials will be disposed of immediately upon completion of drilling and workover activities.

4. The reserve pit and that portion of the location and access road not needed for production facilities and/or operations will be reclaimed within ninety (90) days from the date of well completion, weather permitting.

5. For production, the fill slopes will be reduced from a 1.5:1 slope to a 3:1 slope and the cut slopes will be reduced from a 1.5:1 slope to a 4:1 slope by pushing the fill material back up into the cut.

10. PLANS FOR RECLAMATION OF THE SURFACE

C. Producing Operations: Continued

6. Upon completion of backfilling, leveling and recontouring, all disturbed surfaces (access road and well pad areas) will be scarified to a depth of one (1) foot and left with a rough surface. The stockpiled topsoil will then be evenly redistributed to a depth of six (6) inches over the reclaimed area(s).

7. Prior to commencement of seeding operations, the seedbed will be prepared by disking on the contour to a depth of four (4) to six (6) inches, leaving no depressions that would trap water or form ponds.

   All disturbed surfaces (including the access road and well pad areas) will be reseeded with a seed mixture to be recommended by the Authorized Officer, Bureau of Land Management.

8. Seed will be drilled on the contour with a seed drill equipped with a depth regulator in order to ensure even depths of planting. Seed will be planted between one-quarter (1/4) to one-half (1/2) inches deep, with shrub seeds planted in rows separate from the grass seed, unless otherwise directed by the Authorized Officer, Bureau of Land Management.

   Where drilling is not possible (too steep or rocky), hand broadcast the seed at double the rate indicated above and rake or chain the area to cover the broadcast seed.

9. Fall seeding will be completed after September 15*th* and prior to ground frost. If applicable, spring seeding will be completed after the frost has left the ground and prior to May 15*th*.

   The seeding will be repeated until a satisfactory stand, as determined by the Authorized Officer, is achieved. The first evaluation of growth will be made following the completion of the first growing season.

10. PLANS FOR RECLAMATION OF THE SURFACE - Continued

D. Dry Hole/Abandoned Well Location:

1. At such time as the well is physically plugged and abandoned, Snyder Oil Corporation will submit a "Subsequent Report of Abandonment" to the Authorized Officer for approval. At that time, the Bureau of Land Management will formulate the appropriate surface rehabilitation requirements and attach them as the conditions of approval for final abandonment.

11. SURFACE OWNERSHIP

The well location and proposed access road route are situated on surface estate which is owned by the United States of America and administered by:

Area Manager
Book Cliffs Resource Area Office
Bureau of Land Management
170 South 500 East
Vernal, Utah 84078
Telephone: (801) 789-1362

12. OTHER INFORMATION

A. General Description of the Project Area:

The project area is situated in the Uinta Basin section of the Colorado Plateaus physiographic province in an area of northeastern Utah which has undergone intensive natural gas development activities within the last few years. The overall area is characterized by moderately to severely eroded uplands located between the White River to the south and the Green River to the east. This area is classified as a "High Plains Steppe" (cold desert) and exhibits a sparse to moderate vegetation density which is typical of semi-arid areas at higher elevations (4500-5500').

Generally, local flora consists of native grasses such as salt grass, galleta grass, needle-and-threadgrass, Indian ricegrass; woody species such as shadscale, horsebrush, black sagebrush, fringe sagebrush, big sagebrush, rabbitbrush, and greasewood along the dry drainages.

12. OTHER INFORMATION

A. General Description of the Project Area: Continued

Local fauna consists primarily of mule deer, mountain lions, coyotes, badgers, skunks, rabbits, raptors, and various smaller vertebrate and invertebrate species.

There are no known threatened or endangered species that would be affected by implementation of operations on the Southman Canyon #8-4-J well location.

B. Surface Use Activities:

The primary surface use is for livestock grazing.

C. Proximity of Water, Occupied Dwellings, Archaeological, Historical or Cultural Sites:

1. The closest source of permanent water is the White River, located approximately 1.5 miles south of the proposed well location.

2. The closest occupied dwellings are located approximately ten (10) miles to the northeast of the proposed well location in the community of Bonanza, Utah.

3. Snyder Oil Corporation will be responsible for informing all persons associated with this project that they will be subject to prosecution for damaging, altering, excavating or removing any archaeological, historical, or vertebrate fossil objects or site(s).

   If archaeological, historical or vertebrate fossil materials are discovered, Snyder Oil Corporation will suspend all operations that further disturb such materials and immediately contact the Authorized Officer. Operations will not resume until written authorization to proceed is issued by the Authorized Officer.

   Within five (5) working days the Authorized Officer will evaluate the discovery and inform Snyder Oil Corporation of actions that will be necessary to prevent loss of significant cultural or scientific values.

12. OTHER INFORMATION

C. Proximity of Water, Occupied Dwellings, Archaeological, Historical or Cultural Sites: Continued

3. Snyder Oil Corporation will be responsible for the cost of any mitigation required by the Authorized Officer. The Authorized Officer will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the Authorized Officer that the required mitigation has been completed, Snyder Oil Corporation will be allowed to resume operations.

D. Additional Requirements for Operations on Lands Administered by the Bureau of Land Management:

1. Snyder Oil Corporation will control noxious weeds along rights-of-way for roads, pipelines, well sites, or other applicable facilities. A list of noxious weeds may be obtained from the Bureau of Land Management, or the Uintah County Extension Office.

   On lands administered by the Bureau of Land Management, it is required that a "Pesticide Use Proposal" shall be submitted, and approval obtained, prior to the application of herbicides or other pesticides or possible hazardous chemicals for the control of noxious weeds.

2. Drilling rigs and/or equipment used during drilling operations on this well site will not be stacked or stored on federal lands after conclusion of drilling operations or at any other time without the proper authorization from the Bureau of Land Management.

   However, if Bureau of Land Management authorization is obtained, it is only a temporary measure to allow Snyder Oil Corporation the time to make arrangements for permanent storage at a commercial facility.

3. Snyder Oil Corporation shall contact the Bureau of Land Management between 24 and 48 hours prior to commencement of construction activities on the access road and/or well location: (801) 789-1362. The Bureau of Land Management shall be notified upon site completion and prior to moving drilling tools onto the location.

12. OTHER INFORMATION

D. Additional Requirements for Operations on Lands Administered by the Bureau of Land Management: Cont.

4. One (1) erosion control structure will be constructed in a minor drainage adjacent to the proposed well location/access road route. The actual location of this erosion control structure will be determined by the Bureau of Land Management at the time of well pad/access road construction.

13. LESSEE'S OR OPERATOR'S REPRESENTATIVE AND CERTIFICATION

Representative

Snyder Oil Corporation
Tim A. Burns, Drilling Engineer
1625 Broadway, Suite 2200
Denver, Colorado 80202
Telephone: (303) 592-8500

Heitzman Drill-Site Services*
Dale Heitzman and/or Robert M. Anderson
P.O. Drawer 3579
Casper, Wyoming 82602
Telephone: (307) 266-4840

* Contact for any additional information which may be required for approval of this Application for Permit to Drill.

Certification

All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations (43 CFR 3100), *Onshore Oil & Gas Orders*, the approved plan of operations, and any applicable *Notice to Lessees*.

Snyder Oil Corporation will be fully responsible for the actions of their subcontractors. A copy of these conditions will be furnished to their field representative(s) in order to ensure compliance.

The dirt contractor will be provided with a copy of the Surface Use Plan from the approved Application for Permit to Drill.

13. LESSEE'S OR OPERATOR'S REPRESENTATIVE AND CERTIFICATION

Certification - Continued

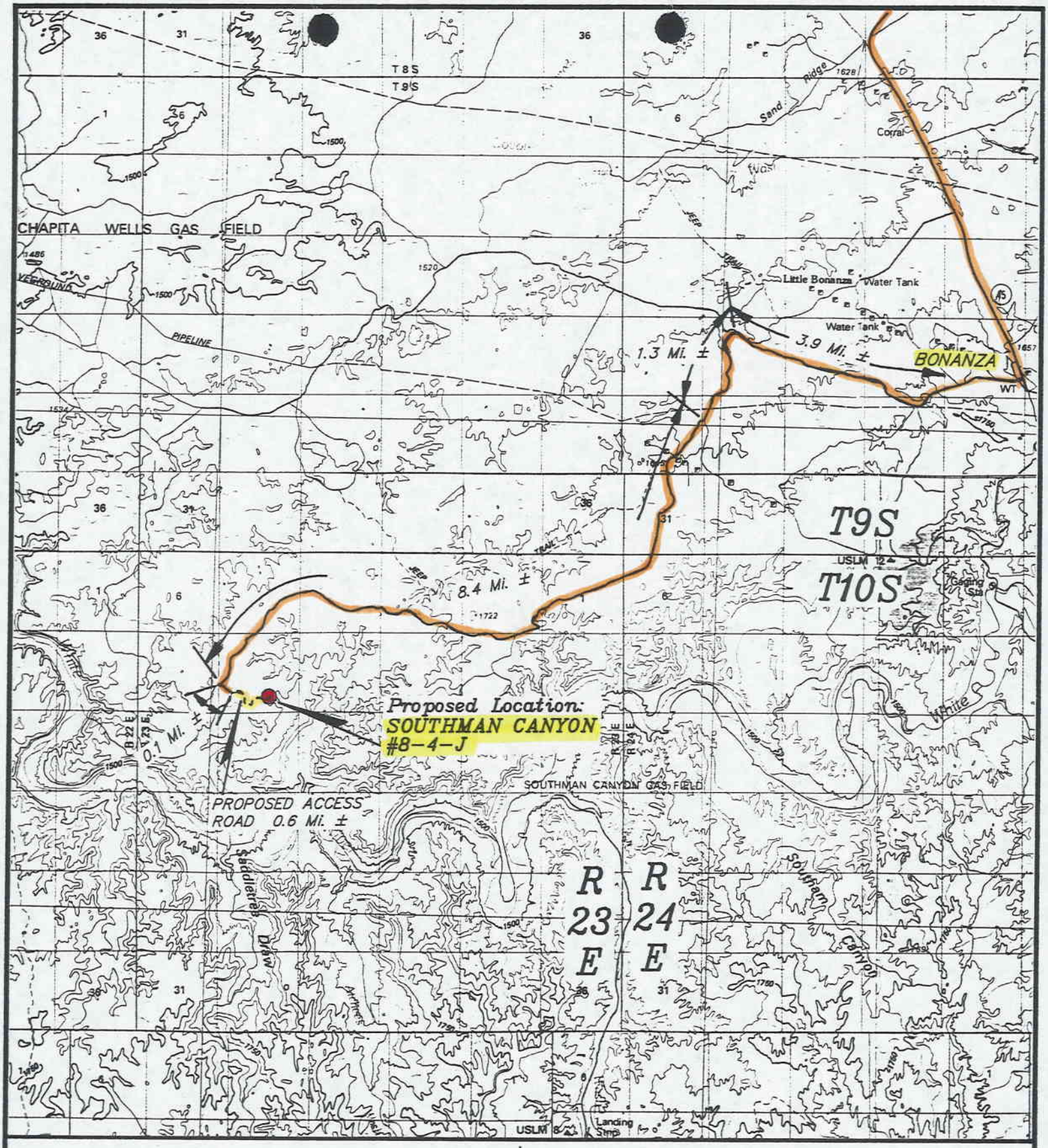
This drilling permit will be valid for a period of one (1) year from the date of approval. An extension period may be granted, if requested, prior to the expiration of the original approval period.

No location will be constructed or moved, no well will be plugged, and no drilling or workover equipment will be removed from a well to be placed in a suspended status without prior approval of the Authorized Officer. If operations are to be suspended, prior approval of the Authorized Officer will be obtained and notification given before resumption of operations.

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Snyder Oil Corporation, their contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

5 August 1994
Date

Robert M. Anderson/Authorized Agent



TOPOGRAPHIC

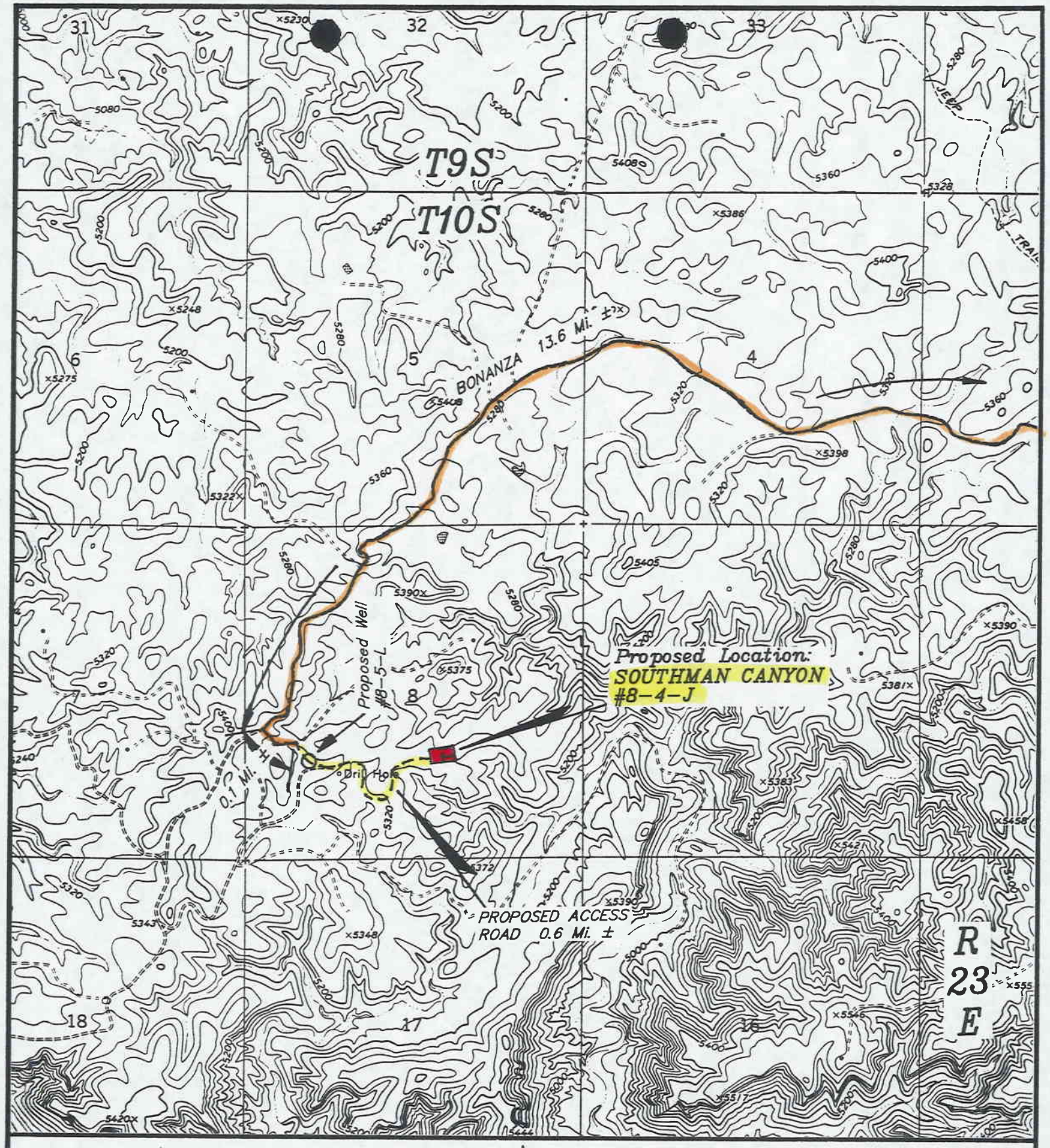
MAP "A"

DATE: 5-3-94 C.B.T.

N

SNYDER OIL CORP.

SOUTHMAN CANYON #8-4-J
SECTION 8, T10S, R23E, S.L.B.&M.
1625' FSL 2200' FEL



TOPOGRAPHIC

MAP "B"

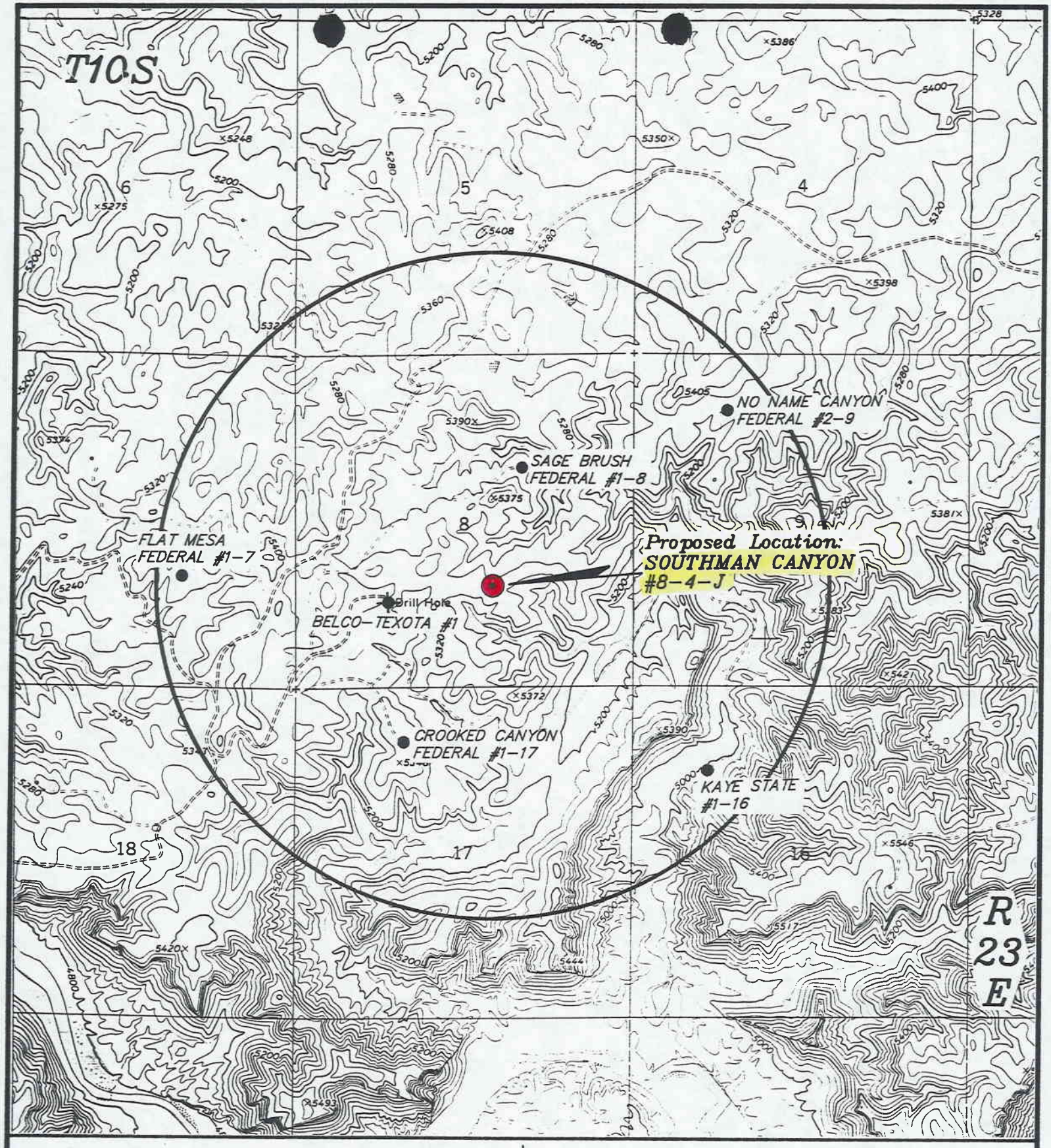
SCALE: 1" = 2000'

DATE: 5-3-94 C.B.T.

N

SNYDER OIL CORP.

SOUTHMAN CANYON #8-4-J
SECTION 8, T10S, R23E, S.L.B.&M.
1625' FSL 2200' FEL



LEGEND:

- ⌀ = Water Wells
- ✦ = Abandoned Wells
- ● = Temporarily Abandoned Wells
- ⌀ = Disposal Wells
- ○ = Drilling Wells
- ● = Producing Wells
- ✦ = Shut-In Wells

N

SNYDER OIL CORP.

SOUTHMAN CANYON #8-4-J
SECTION 8, T10S, R23E, S.L.B.&M.

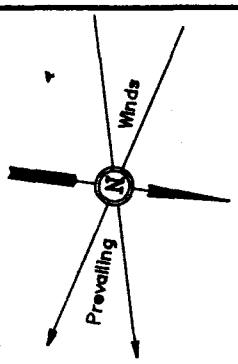
T O P O M A P " C "

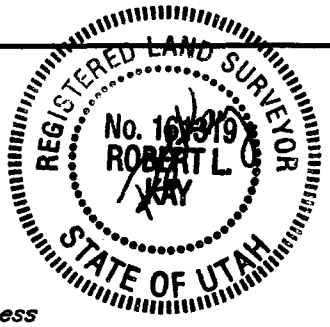
DATE: 5-14-94 C.B.T.

SNYDER OIL CORP.

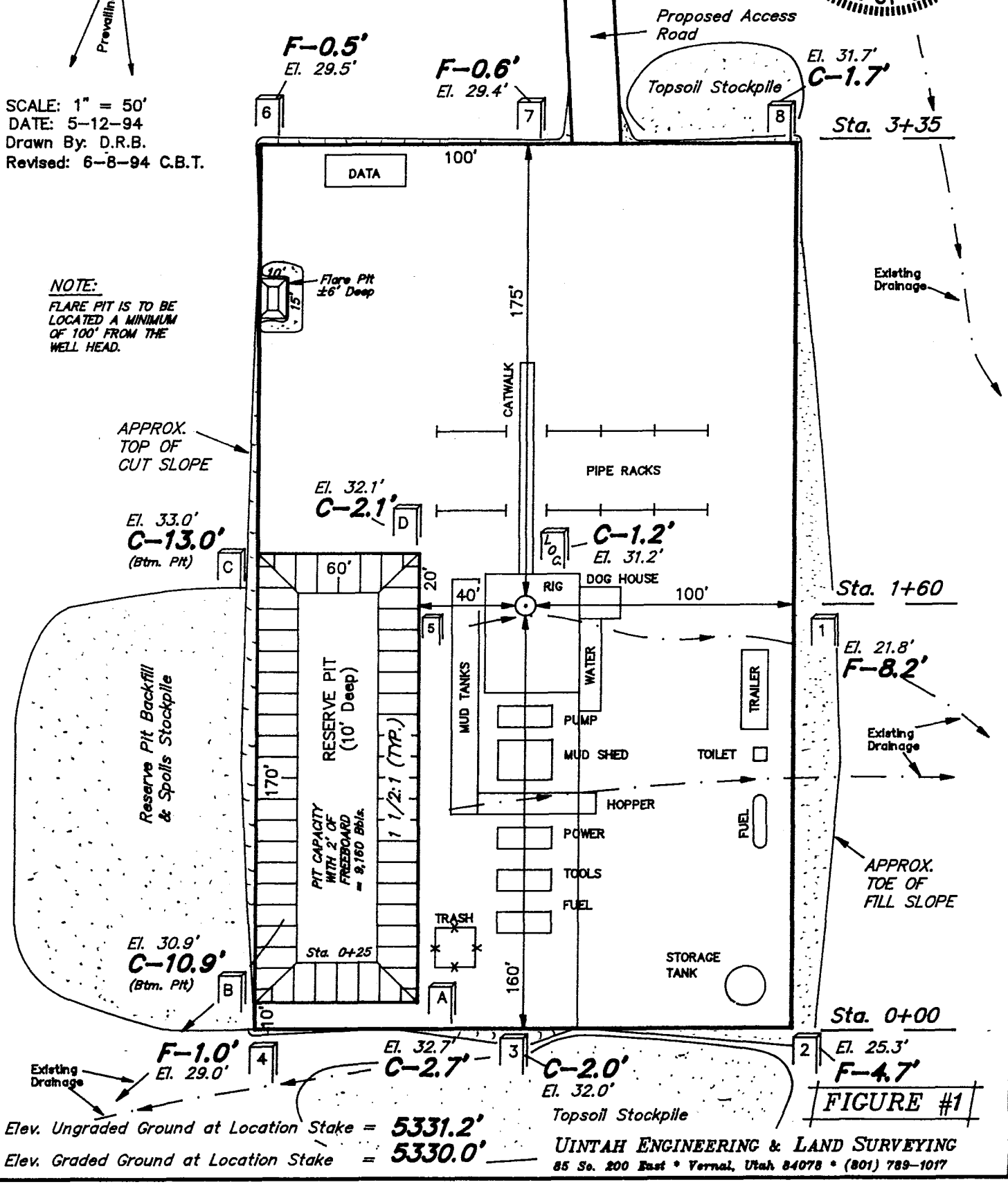
LOCATION LAYOUT FOR

SOUTHMAN CANYON #8-4-J
SECTION 8, T10S, R23E, S.L.B.&M.
1625' FSL 2200' FEL





SCALE: 1" = 50'
DATE: 5-12-94
Drawn By: D.R.B.
Revised: 6-8-94 C.B.T.



Elev. Ungraded Ground at Location Stake = 5331.2'
Elev. Graded Ground at Location Stake = 5330.0'

FIGURE #1

UINTAH ENGINEERING & LAND SURVEYING
85 So. 200 East • Vernal, Utah 84078 • (801) 789-1017

SNYDER OIL CORP.

TYPICAL CROSS SECTIONS FOR

SOUTHMAN CANYON #8-4-J
SECTION 8, T10S, R23E, S.L.B.&M.
1625' FSL 2200' FEL

1" = 20' X-Section Scale
1" = 50'

DATE: 5-12-94
Drawn By: D.R.B.

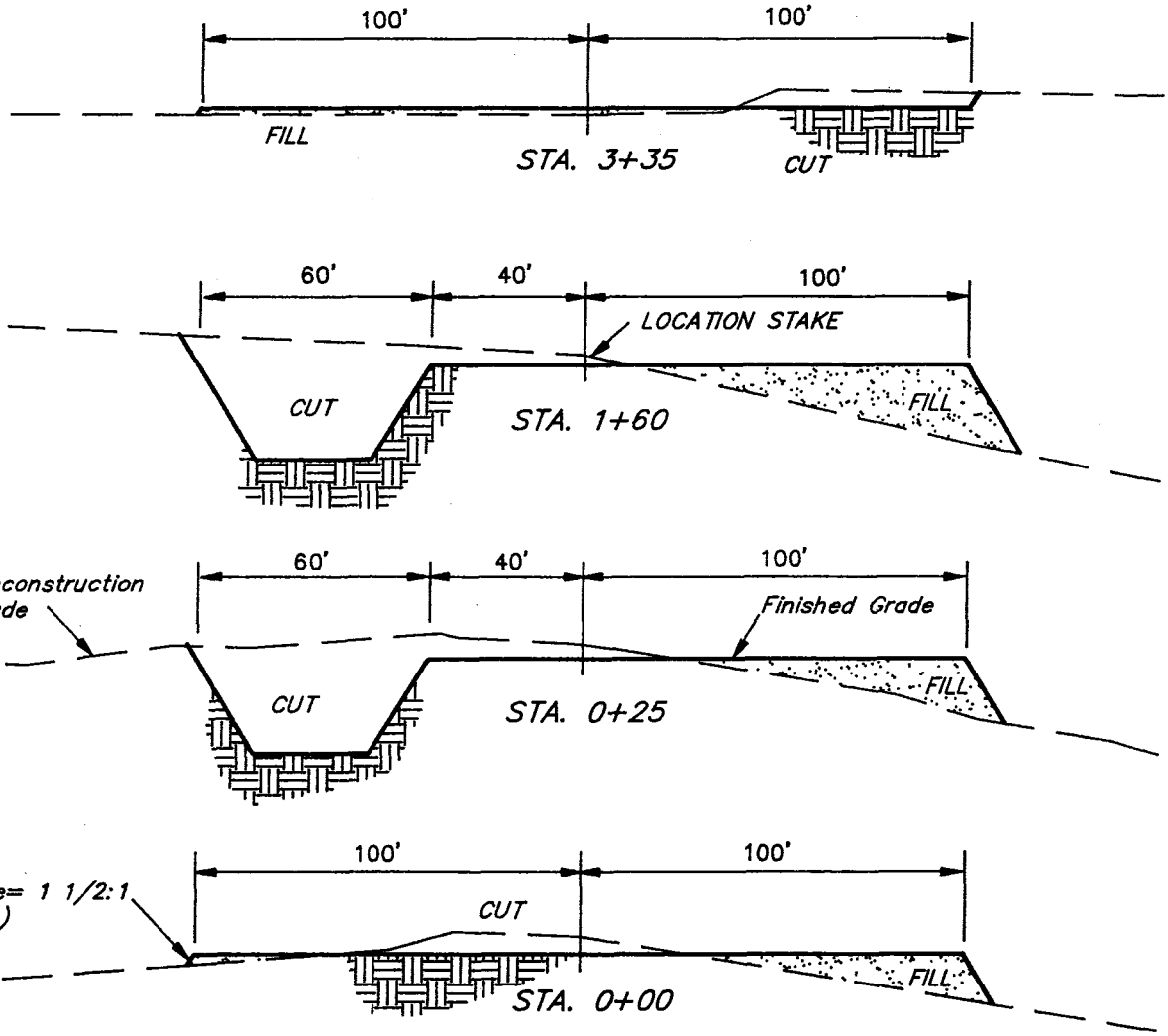


FIGURE #2

APPROXIMATE YARDAGES

CUT

(6") Topsoil Stripping	=	1,240 Cu. Yds.
Remaining Location	=	5,080 Cu. Yds.
TOTAL CUT	=	6,320 CU.YDS.
FILL	=	3,580 CU.YDS.

EXCESS MATERIAL AFTER 5% COMPACTION	=	2,550 Cu. Yds.
Topsoil & Pit Backfill (1/2 Pit Vol.)	=	2,550 Cu. Yds.
EXCESS CUT MATERIAL	=	0 Cu. Yds.

UINTAH ENGINEERING & LAND SURVEYING
85 So. 200 East * Vernal, Utah 84078 * (801) 789-1017

U.S.
Department of the Interior
Bureau of Land Management
Utah State Office

Summary Report of
Inspection for Cultural Resources

Project Authorization No. U-94-GB-223b

Report Acceptable Yes __ No __
Mitigation Acceptable Yes __ No __

Comments: _____

1. Report Title SOUTHMAN CAN. #8-4-J & ACCESS

2. Development Company SNYDER OIL CORPORATION

3. Report Date 05 10 1994 4. Antiquities Permit No. 94-UT-54939

5. Responsible Institution GRAND RIVER INS County Uintah

6. Fieldwork Location: TWN 10S Range 23E Section(s) 08

TWN ____ Range ____ Section(s) ____

7. Resource Area BC TWN ____ Range ____ Section(s) ____

PO=Pony Express, BR=Bear River, WS=Warm Springs, BC=Book Cliffs, HR=House Range, SE=Sevier River, HM=Henry Mountains, BE=Beaver River, DX=Dixie, KA=Kanab, ES=Escalante, SJ=San Juan, GR=Grand, SR=San Raphael, DM=Diamond Mountain

8. Description of Examination Procedures: A 100 percent pedestrian cultural resources survey of the proposed well location was made by walking a series of concentric circles around the flagged center to a diameter of 750 feet. Related access was surveyed by walking zigzag transects to cover a swath 100 feet to both sides of the flagged centerline.

9.
Linear Miles Surveyed and/or: 0.6
Definable Acres Surveyed and/or: ____
Legally Undefinable Acres Surveyed: 10

10. Inventory Type I
R=Reconnaissance
I=Intensive
S=Statistical

11. Description of Findings (attach appendices, if appropriate)

No cultural resources were identified.

12. Number Sites found 0
No sites = 0

13. Collection N
Y=Yes N=No

14. Actual/Potential National Register Properties Affected: None.

15. Literature Search, Location/Date: BLM Vernal District Office 5/3/94

16. Conclusion/Recommendations:

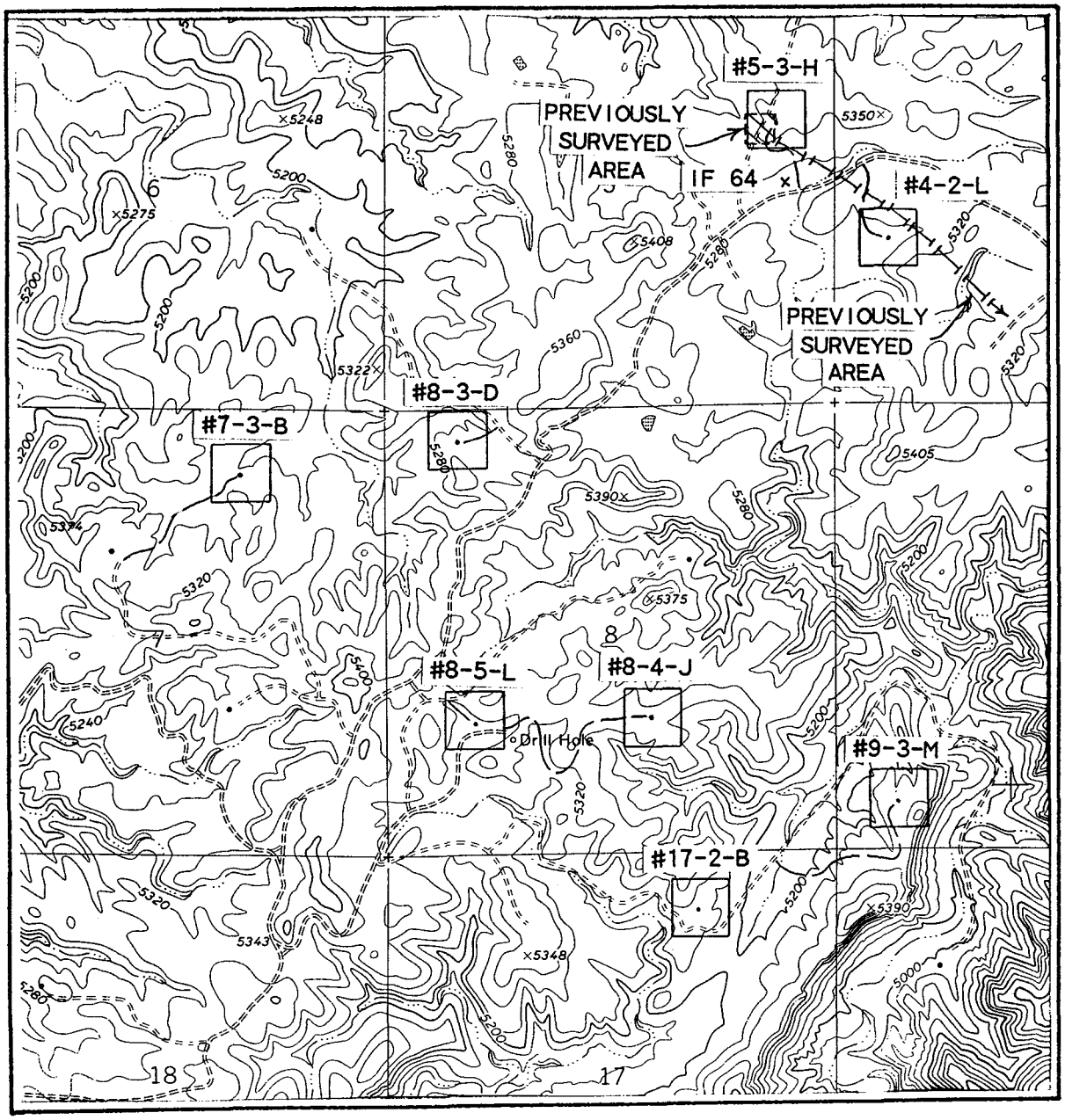
No significant historic properties were identified. Archaeological clearance is recommended.

17. Signature of Administrator & Field Supervisor: Administrator _____
Carl E. Conner

Field Supervisor Carl E. Conner

*For extra locationals use additional 8100-3 forms

UT 8100-3
(2/85)



Asphalt Wash Quadrangle
Utah--Uintah County
1987
USGS 7.5' Series (topographic)
Scale 1:24000
Contour interval 40 feet
T. 10S., R. 23E., S.L.P.M.

Cultural resources inventory of fifteen proposed well locations and related access routes in the Southman Canyon Gas Field, Uintah County, Utah for Snyder Oil Corporation. Area surveyed for cultural resources is highlighted. [GRI Project No. 9430, 5/10/94]

WORKSHEET
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 08/08/94

API NO. ASSIGNED: 43-047-32542

WELL NAME: SOUTHMAN CANYON 8-4-J
OPERATOR: SNYDER OIL CORP (N1305)

PROPOSED LOCATION:
NWSE 08 - T10S - R23E
SURFACE: 1625-FSL-2200-FEL
BOTTOM: 1625-FSL-2200-FEL
UINTAH COUNTY
NATURAL BUTTES FIELD (630)

LEASE TYPE: FED
LEASE NUMBER: UTU-37355

PROPOSED PRODUCING FORMATION: MVRD

INSPECT LOCATION BY: / /		
TECH REVIEW	Initials	Date
Engineering		
Geology		
Surface		

RECEIVED AND/OR REVIEWED:

Y Plat
Y Bond: Federal[Y] State[] Fee[]
(Number WY-2272)
N Potash (Y/N)
N Oil shale (Y/N)
Y Water permit
(Number 49-991)
N RDCC Review (Y/N)
(Date:)

LOCATION AND SITING:

___ R649-2-3. Unit: ___

___ R649-2-3. General.

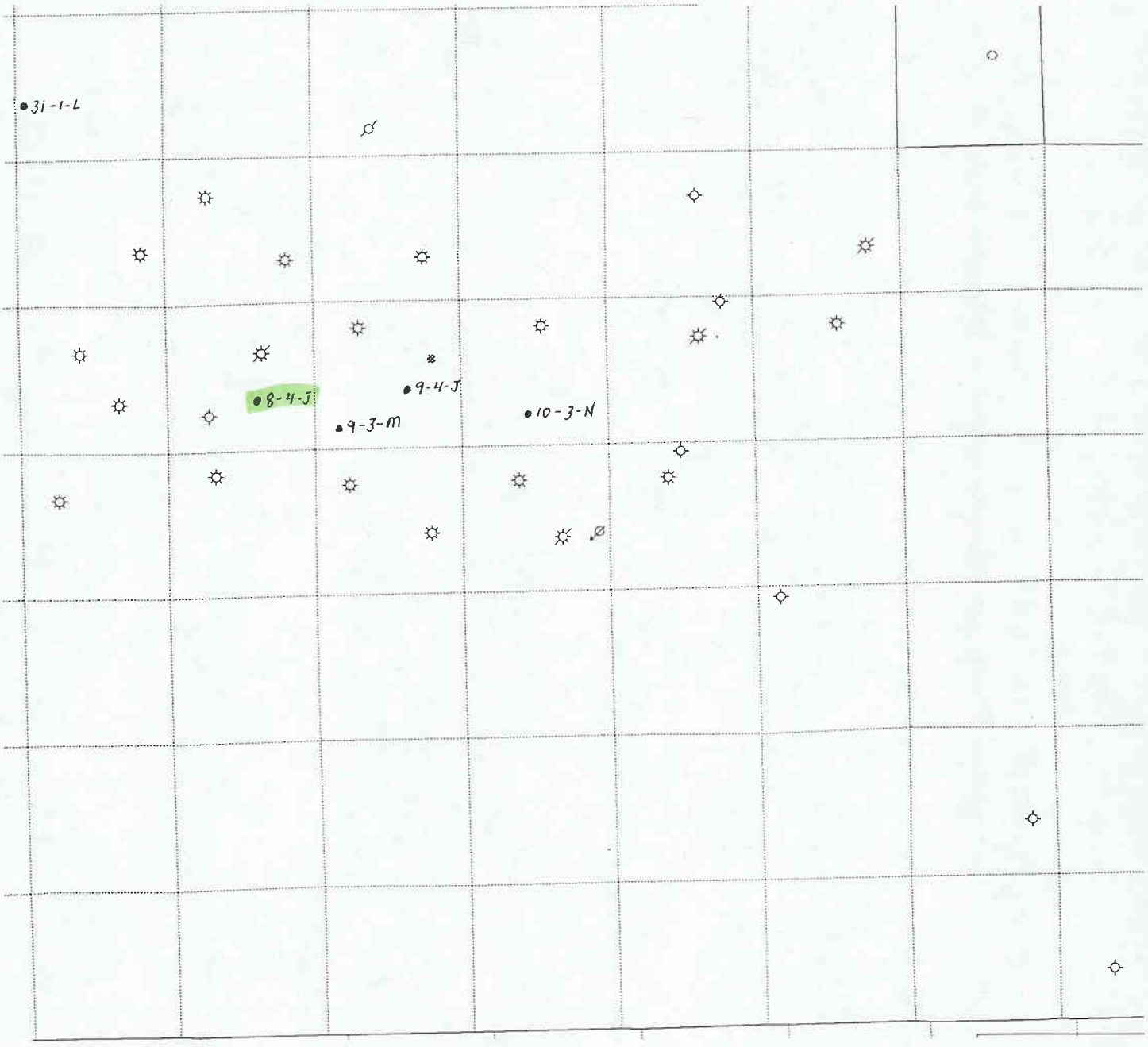
___ R649-3-3. Exception.

✓ Drilling Unit.
Board Cause no: 179-6
Date: 5/27/94

COMMENTS:

STIPULATIONS:

NATURAL BUTTES
SNYDER SOUTHMAN CANYON
31-1-L, 8-4-J, 9-4-J, 9-3-M, 10-3-N



0 4000 8000

STATE OF UTAH

Operator: SNYDER OIL CORP.	Well Name: SOUTHMAN CANYON 8-4-J
Project ID: 43-047-32542	Location: SEC. 08 - T10S - R23E

Design Parameters:

Mud weight (10.50 ppg)	: 0.545	psi/ft
Shut in surface pressure	: 3781	psi
Internal gradient (burst)	: 0.093	psi/ft
Annular gradient (burst)	: 0.000	psi/ft

Tensile load is determined using buoyed weight
Service rating is "Sweet"

Design Factors:

Collapse	: 1.125	
Burst	: 1.00	
8 Round	: 1.80	(J)
Buttress	: 1.60	(J)
Other	: 1.50	(J)
Body Yield	: 1.50	(B)

	Length (feet)	Size (in.)	Weight (lb/ft)	Grade	Joint	Depth (feet)	Drift (in.)	Cost
1	8,365	4.500	11.60	C-75	LT&C	8,365	3.875	

	Collapse Load (psi)	Collapse Strgth (psi)	Collapse S.F.	Burst Load (psi)	Min Int Yield Strgth (psi)	Burst S.F.	Tension Load (kips)	Tension Strgth (kips)	Tension S.F.
1	4563	6100	1.337	4563	7290	1.60	81.46	212	2.60 J

Prepared by : FRM, Salt Lake City, UT
Date : 09-20-1994
Remarks :

Minimum segment length for the 8,365 foot well is 1,000 feet.
SICP is based on the ideal gas law, a gas gravity of 0.69, and a mean gas temperature of 116°F (Surface 74°F , BHT 158°F & temp. gradient 1.000°/100 ft.)
The mud gradient and bottom hole pressures (for burst) are 0.545 psi/ft and 4,563 psi, respectively.

NOTE: The design factors used in this casing string design are as shown above. As a general guideline, Lone Star Steel recommends using minimum design factors of 1.125 - Collapse (with evacuated casing), 1.0 - Burst, 1.8 - 8 Round Tension, 1.6 - Buttress Tension, and 1.5 - Body Yield. Collapse strength under axial tension was calculated based on the Westcott, Dunlop and Kemler curve. Engineering responsibility for use of this design will be that of the purchaser.

Costs for this design are based on a 1987 pricing model. (Version 1.06)

State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt
Governor
Ted Stewart
Executive Director
James W. Carter
Division Director

355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
801-538-5340
801-359-3940 (Fax)
801-538-5319 (TDD)

September 20, 1994

Snyder Oil Corporation
1625 Broadway, Suite 2200
Denver, Colorado 80202

Re: Southman Canyon 8-4-J Well, 1625' FSL, 2200' FEL, NW SE, Sec. 8, T. 10 S., R. 23 E., Uintah County, Utah

Gentlemen:

Pursuant to the order issued by the Board of Oil, Gas and Mining in Cause No. 179-6 dated May 27, 1994, and Utah Admin. R.649-3-4, Permitting of Wells to be Drilled, Deepened or Plugged-Back, approval to drill the referenced well is hereby granted.

In addition, the following specific actions are necessary to fully comply with this approval:

1. Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules.

2. Notification to the Division within 24 hours after drilling operations commence.

3. Submittal of Entity Action Form, Form 6, within five working days following commencement of drilling operations and whenever a change in operations or interests necessitates an entity status change.

4. Submittal of the Report of Water Encountered During Drilling, Form 7.

5. Prompt notification prior to commencing operations, if necessary, to plug and abandon the well. Notify Frank R. Matthews, Petroleum Engineer, (Office) (801)538-5340, (Home) (801)476-8613, or K. Michael Hebertson, Reclamation Specialist, (Home) (801)269-9212.

6. Compliance with the requirements of Utah Admin. R. 649-3-20, Gas Flaring or Venting, if the well is completed for production.

This approval shall expire one year after date of issuance unless substantial and continuous operation is underway or a request for an extension is made prior to the approval expiration date. The API number assigned to this well is 43-047-32542.

Sincerely,

R.J. Firth
Associate Director

ldc
Enclosures
cc: Uinatah County Assessor
Bureau of Land Management, Vernal District Office
WOI1

Form 3160-3
(July 1992)

FORM APPROVED
OMB NO. 1004-0136
Expires: February 28, 1995

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED
SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)
SEP 21 1994
DIV. OF OIL, GAS & MINING

LEASE DESIGNATION AND SERIAL NO.
UTU-37355

IF INDIAN, ALLOTTEE OR TRIBE NAME
Not Applicable

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK
DRILL [X] DEEPEN [ ]

b. TYPE OF WELL
OIL WELL [ ] GAS WELL [X] OTHER SINGLE ZONE [ ] MULTIPLE ZONE [X]

7. UNIT AGREEMENT NAME
Not Applicable

8. FARM OR LEASE NAME, WELL NO.
Southman Canyon 8-4-J

2. NAME OF OPERATOR
Snyder Oil Corporation Phone: (303) 592-8500

9. API WELL NO.

3. ADDRESS AND TELEPHONE NO.
1625 Broadway, Suite 2200; Denver, Colorado 80202

10. FIELD AND POOL, OR WILDCAT
Southman Canyon

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface
1625' FSL, 2200' FEL (SW¼NW¼SE¼) Section 8, T10S, R23E
At proposed prod. zone
Same as above.

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Section 8, T10S, R23E

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
Approximately ten (10) miles southwest of Bonanza, Utah

12. COUNTY OR PARISH: Uintah
13. STATE: Utah

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)	16. NO. OF ACRES IN LEASE	17. NO. OF ACRES ASSIGNED TO THIS WELL
1625'	1920.00	160
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	**19. PROPOSED DEPTH**	**20. ROTARY OR CABLE TOOLS**
1950' ±	8365'	Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
5331' GR

22. APPROX. DATE WORK WILL START*
October 1, 1994

23. PROPOSED CASING AND CEMENTING PROGRAM (All New)

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	8-5/8" J-55	24.0#	0- 400'	300 sx circulated to surface *
7-7/8"	4-1/2" M-75	11.6#	0-8365'	1550 sx cement *

* Cement volumes may change due to hole size. Calculate from Caliper Log.

EIGHT-POINT RESOURCE PROTECTION PLAN ATTACHED.

I hereby certify that Snyder Oil Corporation is authorized by the proper Lease Interest Owners to conduct lease operations associated with this Application for Permit to Drill the Southman Canyon Federal #8-4-J, Federal Lease #UTU-37355. Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by Snyder Oil Corporation, Nationwide Bond #WY-2272, who will be responsible for compliance with all the terms and conditions of that portion of the lease associated with this Application.

AUG 1994 Received BLM Vernal, Utah

RECEIVED
AUG 9 1994

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.
SIGNED Tim A. Burns TITLE Drilling Engineer DATE August 4, 1994
Tim A. Burns

(This space for Federal or State office use)

PERMIT NO. 43-047-32542 APPROVAL DATE

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

CONDITIONS OF APPROVAL, IF ANY:

NOTICE OF APPROVAL

CONDITIONS OF APPROVAL ATTACHED TO OPERATOR'S COPY

APPROVED BY Howard B. Cleavinger TITLE ASSISTANT DISTRICT MANAGER MINERALS DATE SEP 20 1994

Div OGM UT-080-4M-139

*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

CONDITIONS OF APPROVAL
APPLICATION FOR PERMIT TO DRILL

Company/Operator: Snyder Oil Corporation

Well Name & Number: Southman Canyon 8-4-J

API Number: 43-047-32542

Lease Number: UTU-37355

Location: NWSE Sec. 08 T.10S R. 23E

NOTIFICATION REQUIREMENTS

Location Construction	-	at least forty-eight (48) hours prior to construction of location and access roads.
Location Completion	-	prior to moving on the drilling rig.
Spud Notice	-	at least twenty-four (24) hours prior to spudding the well.
Casing String and Cementing	-	at least twenty-four (24) hours prior to running casing and cementing all casing strings.
BOP and Related Equipment Tests	-	at least twenty-four (24) hours prior to initiating pressure tests.
First Production Notice	-	within five (5) business days after new well begins, or production resumes after well has been off production for more than ninety (90) days.

For more specific details on notification requirements, please check the Conditions of Approval for Notice to Drill.

CONDITIONS OF APPROVAL FOR NOTICE TO DRILL

Approval of this application does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

All lease and/or unit operations will be conducted in such a manner that full compliance is made with applicable laws, regulations (43 CFR 3100), Onshore Oil and Gas Orders, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished the field representative to insure compliance.

Be aware fire restrictions may be in effect when location is being constructed and/or when well is being drilled. Contact the appropriate Surface Management Agency for information.

A. DRILLING PROGRAM

1. Estimated Depth at Which Oil, Gas, Water, or Other Mineral Bearing Zones are Expected to be Encountered

Report ALL water shows and water-bearing sands to Tim Ingwell of this office. Copies of State of Utah form OGC-8-X are acceptable. If noticeable water flows are detected, submit samples to this office along with any water analyses conducted.

All usable water and prospectively valuable minerals (as described by BLM at onsite) encountered during drilling, will be recorded by depth and adequately protected. All oil and gas shows will be tested to determine commercial potential.

2. Pressure Control Equipment

The BOP and related equipment shall meet the minimum requirements of Onshore Oil and Gas Order No. 2 for equipment and testing requirements, procedures, etc., for a **3M** system and individual components shall be operable as designed. Chart recorders shall be used for all pressure tests.

Test charts, with individual test results identified, shall be maintained on location while drilling and shall be made available to a BLM representative upon request.

If an air compressor is on location and is being utilized to provide air for the drilling medium while drilling, the special drilling requirements in Onshore Oil and Gas Order No. 2, regarding air or gas drilling shall be adhered to. If a mist system is being utilized then the requirement for a deduster shall be waived.

The Vernal District Office shall be notified, at least 24 hours prior to initiating the pressure tests, in order to have a BLM representative on location during pressure testing.

3. Casing Program and Auxiliary Equipment

Surface casing shall have centralizers on the bottom three joints, with a minimum of one centralizer per joint.

As a minimum, the usable water and oil shale resources shall be isolated and/or protected by having a cement top for the production casing at least 200 ft. above the top of the Mahogany Oil Shale zone, identified at ± **2057** ft.. If gilsonite is encountered while drilling, it shall be isolated and/or protected via the cementing program.

The Vernal District Office shall be notified at least 24 hours prior to the running and cementing of all casing strings, in order to have a BLM representative on location while running and cementing all casing strings.

4. Mud Program and Circulating Medium

Hazardous substances specifically listed by the EPA as a hazardous waste or demonstrating a characteristic of a hazardous waste will not be used in drilling, testing, or completion operations.

No chromate additives will be used in the mud system on Federal and Indian lands without prior BLM approval to ensure adequate protection of fresh water aquifers.

5. Coring, Logging and Testing Program

Daily drilling and completion progress reports shall be submitted to this office on a weekly basis.

All Drill Stem tests (DST) shall be accomplished during daylight hours, unless specific approval to start during other hours is obtained from the AO. However, DSTs may be allowed to continue at night if the test was initiated during daylight hours and the rate of flow is stabilized and if adequate lighting is available (i.e., lighting which is adequate for visibility and vaporproof for safe operations). Packers can be released, but tripping should not begin before daylight unless prior approval is obtained from the AO.

A cement bond log (CBL) will be run from the production casing shoe to ± **1857** ft. and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.

Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (Form 3160-4) will be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3164. Two copies of all logs, core descriptions, core analyses, well-test data, geologic summaries, sample description, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, will be filed with Form 3160-4. Samples (cuttings, fluids, and/or gases) will be submitted when requested by the AO.

6. Notifications of Operations

No location will be constructed or moved, no well will be plugged, and no drilling or workover equipment will be removed from a well to be placed in a suspended status without prior approval of the AO. If operations are to be suspended, prior approval of the AO will be obtained and notification given before resumption of operations.

The Vernal District Office shall be notified, during regular work hours (7:45 a.m.-4:30 p.m., Monday through Friday except holidays), at least 24 hours **prior** to spudding the well.

Operator shall report production data to MMS pursuant to 30 CFR 216.5 using form MMS/3160.

Immediate Report: Spills, blowouts, fires, leaks, accidents, or any other unusual occurrences shall be promptly reported in accordance with the requirements of NTL-3A or its revision.

If a replacement rig is contemplated for completion operations, a "Sundry Notice" (Form 3160-5) to that effect will be filed, for prior approval of the AO, and all conditions of this approved plan are applicable during all operations conducted with the replacement rig.

The date on which production is commenced or resumed will be construed for oil wells as the date on which liquid hydrocarbons are first sold or shipped from a temporary storage facility, such as a test tank, and for which a run ticket is required to be generated or, the date on which liquid hydrocarbons are first produced into a permanent storage facility, whichever first occurs; and, for gas wells as the date on which associated liquid hydrocarbons are first sold or shipped from a temporary storage facility, such as a test tank, and for which a run ticket is required to be generated or, the date on which gas is first measured through permanent metering facilities, whichever first occurs.

Should the well be successfully completed for production, the AO will be notified when the well is placed in a producing status. Such notification will be sent by telegram or other written communication, not later than five (5) days following the date on which the well is placed on production.

Gas produced from this well may not be vented or flared beyond an initial authorized test period of 30 days or 50 MMCF following its completion, whichever occurs first, without the prior written approval of the Authorized Officer. Should gas be vented or flared without approval beyond the authorized test period, the operator may be directed to shut-in the well until the gas can be captured or approval to continue venting or flaring as uneconomic is granted and the operator shall be required to compensate the lessor for that portion of the gas vented or flared without approval which is determined to have been avoidably lost.

A schematic facilities diagram as required by 43 CFR 3162.7-2, 3162.7-3, and 3162.7-4 shall be submitted to the appropriate District Office within thirty (30) days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with 43 CFR 3162.7-4.

No well abandonment operations will be commenced without the prior approval of the AO. In the case of newly drilled dry holes or failures, and in emergency situations, oral approval will be obtained from the AO. A "Subsequent Report of Abandonment" Form 3160-5, will be filed with the AO within thirty (30) days following completion of the well for abandonment. This report will indicate where plugs were placed and the current status of surface restoration. Final abandonment will not be approved until the surface reclamation work required by the approved APD or approved abandonment notice has been completed to the satisfaction of the AO or his representative, or the appropriate Surface Managing Agency.

7. Other Information

All loading lines will be placed inside the berm surrounding the tank battery.

All off-lease storage, off-lease measurement, or commingling on-lease or off-lease will have prior written approval from the AO.

Gas meter runs for each well will be located within 500 feet of the wellhead. The gas flowline will be buried or anchored down from the wellhead to the meter and within 500 feet downstream of the meter run or any production facilities. Meter runs will be housed and/or fenced.

The oil and gas measurement facilities will be installed on the well location. The oil and gas meters will be calibrated in place prior to any deliveries. Tests for meter accuracy will be conducted monthly for the first three months on new meter installations and at least quarterly thereafter. The AO will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports will be submitted to the Vernal District Office. All meter measurement facilities will conform with Onshore Oil & Gas Order No. 4 for liquid hydrocarbons and Onshore Oil & Gas Order No. 5 for natural gas measurement.

The use of materials under BLM jurisdiction will conform to 43 CFR 3610.2-3.

There will be no deviation from the proposed drilling and/or workover program without prior approval from the AO. Safe drilling and operating practices must be observed. All wells, whether drilling, producing, suspended, or abandoned will be identified in accordance with 43 CFR 3162.

"Sundry Notice and Report on Wells" (Form 3160-5) will be filed for approval for all changes of plans and other operations in accordance with 43 CFR 3162.3-2.

Section 102(b)(3) of the Federal Oil and Gas Royalty Management Act of 1982, as implemented by the applicable provisions of the operating regulations at Title 43 CFR 3162.4-1(c), requires that "not later than the 5th business day after any well begins production on which royalty is due anywhere on a lease site or allocated to a lease site, or resumes production in the case of a well which has been off production for more than 90 days, the operator shall notify the authorized officer by letter or sundry notice, Form 3160-5, or orally to be followed by a letter or sundry notice, of the date on which such production has begun or resumed."

If you fail to comply with this requirement in the manner and time allowed, you shall be liable for a civil penalty of up to $10,000 per violation for each day such violation continues, not to exceed a maximum of 20 days. See Section 109(c)(3) of the Federal Oil and Gas Royalty Management Act of 1982 and the implementing regulations at Title 43 CFR 3162.4-1(b)(5)(ii).

APD approval is valid for a period of one (1) year from the signature date. An extension period may be granted, if requested, prior to the expiration of the original approval period.

In the event after-hours approvals are necessary, please contact one of the following individuals:

Ed Forsman Petroleum Engineer	(801) 789-7077
Wayne Bankert Petroleum Engineer	(801) 789-4170
BLM FAX Machine	(801) 781-4410

EPA'S LIST OF NONEXEMPT EXPLORATION AND PRODUCTION WASTES

While the following wastes are nonexempt, they are not necessarily hazardous.

- Unused fracturing fluids or acids
- Gas plant cooling tower cleaning wastes
- Painting wastes
- Oil and gas service company wastes, such as empty drums, drum rinsate, vacuum truck rinsate, sandblast media, painting wastes, spend solvents, spilled chemicals, and waste acids
- Vacuum truck and drum rinsate from trucks and drums, transporting or containing nonexempt waste
- Refinery wastes
- Liquid and solid wastes generated by crude oil and tank bottom reclaimers
- Used equipment lubrication oils
- Waste compressor oil, filters, and blowdown
- Used hydraulic fluids
- Waste solvents
- Waste in transportation pipeline-related pits
- Caustic or acid cleaners
- Boiler cleaning wastes
- Boiler refractory bricks
- Incinerator ash
- Laboratory wastes
- Sanitary wastes
- Pesticide wastes
- Radioactive tracer wastes
- Drums, insulation and miscellaneous solids.

Snyder Oil Corporation

P.O. Box 695
Vernal, Utah 84078
801/789-0323

February 29, 1996

Utah State Division of Oil Gas & Mining
3 Triad Center, Suite #350
355 W. North Temple
Salt Lake City, UT 84180-1203

MAR - 1 1996

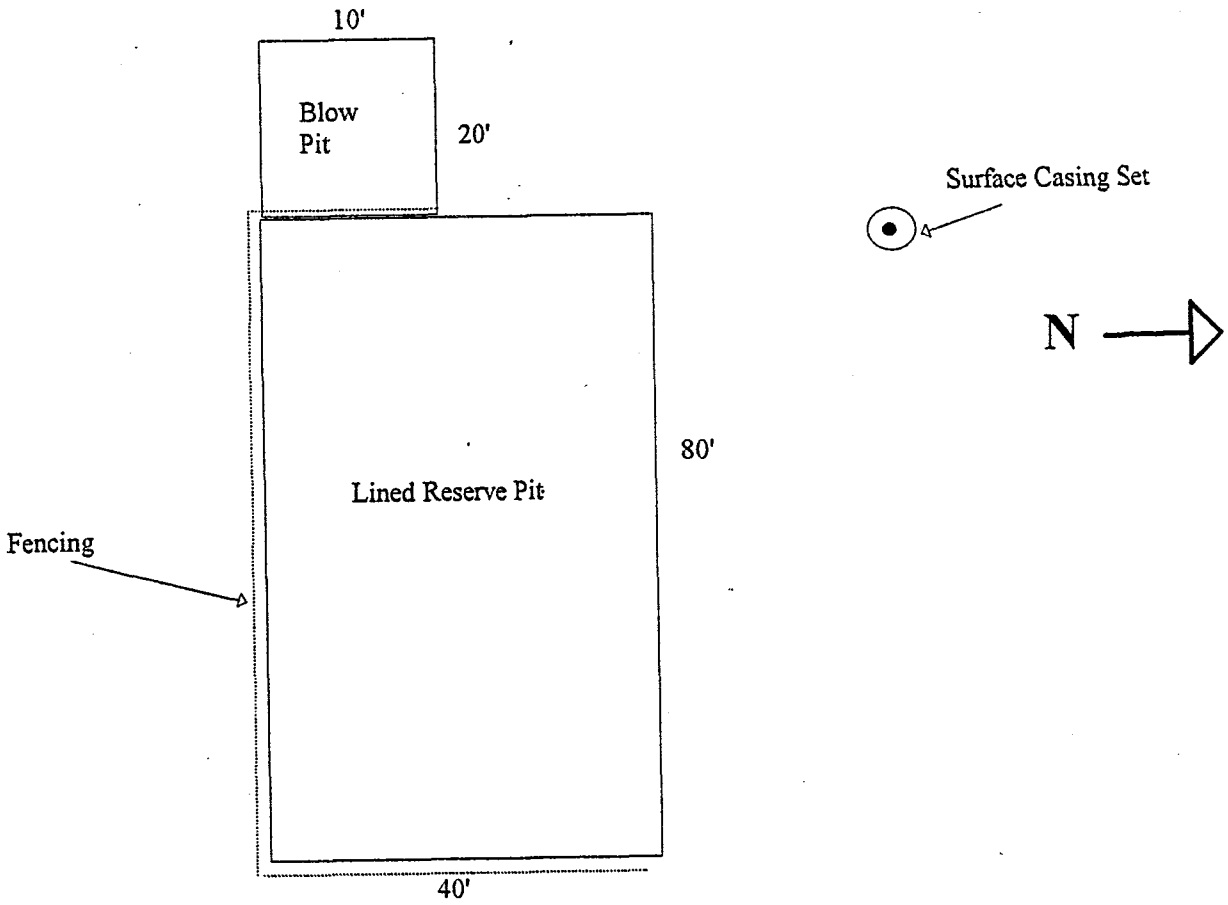
RE: Site Security Diagrams

Gentlemen:

Enclosed are copies of Site Security Diagrams for wells operated by Snyder Oil Corporation. We will send you copies of the rest of the diagrams when we receive them from Buys and Associates. If you have any questions, please contact me at 801-789-0323.

Sincerely,

Lucy Nemec
Senior Clerk



43-047-32542

SITE SECURITY PLAN LOCATED AT:

SNYDER OIL CORPORATION
P.O. BOX 695
VERNAL, UT 84078

Snyder Oil Corporation

SOUTHMAN CANYON 8-4
NW SE SEC 8 T10S R23E
UINTAH COUNTY, UT
Lease # U-37355

Prepared By: TM 01/15/96

BUYS & ASSOCIATES, INC.
Environmental Consultants

SNYDER OIL CORPORATION

VALVING DETAIL

(Site Security Diagram Attachment)

Position of Valves and Use of Seals for Tanks in Production Phase

Valve	Line Purpose	Position	Seal Installed
E	Overflow/Equalizer	Closed	Yes
F	Fill	Open	No
W	Water	Closed	Yes
D	Drain	Closed	Yes
S	Sales	Closed	Yes

Position of Valves and Use of Seals for the Tank in Sales Phase

Valve	Line Purpose	Position	Seal Installed
E	Overflow/Equalizer	Closed	Yes
F	Fill	Closed	Yes
W	Water	Closed	Yes
D	Drain	Closed	Yes
S	Sales	Closed*	Yes

*The sales line will be opened by the purchaser at the time of sale. Until that time the sales line will remain closed and sealed.

DIVISION OF OIL, GAS AND MINING

SPUDDING INFORMATION

NAME OF COMPANY: SNYDER OIL CO.

WELL NAME: SOUTHMAN CANYON 8-4-J

API NO. 43-047-32542

Section 8 Township 10S Range 23E County UINTAH

Drilling Contractor EXETER

Rig # 8

SPUDDED: Date 11/2/94

Time

How DRY HOLE

Drilling will commence

Reported by MIKE ANTHONY

Telephone #

Date 11/3/94 SIGNED DWH

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING

ENTITY ACTION FORM - FORM 6

OPERATOR SNYDER OIL CORPORATION

ADDRESS P.O. Box 695
Vernal, UT 84078

OPERATOR ACCT. NO. N 1305

ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	WELL LOCATION QQ	SC	TP	RG	COUNTY	SPUD DATE	EFFECTIVE DATE
A	99999	11919	43-047-32542	Southman Canyon 8-4-J	NWSE	8	10S	23E	Uintah	11/2/94	11/2/94
WELL 1 COMMENTS: Entity added 5-16-96. Lc											
WELL 2 COMMENTS:											
WELL 3 COMMENTS:											
WELL 4 COMMENTS:											
WELL 5 COMMENTS:											

ACTION CODES (See instructions on back of form)
- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity
- E - Other (explain in comments section)

NOTE: Use COMMENT section to explain why each Action Code was selected.

(3/89)

RECEIVED
MAY 15 1996
DIV. OF OIL, GAS & MINING

Signature

Senior Clerk — Title

5/14/96 — Date

Phone No. (801) 789-0323

FORM 3160-3
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry a different reservoir.
Use "APPLICATION FOR PERMIT -" for such proposals

SUBMIT IN TRIPLICATE

5. Lease Designation and Serial No.
USA-U-37355

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

1. Type of Well
[ ] Oil Well [X] Gas Well [ ] Other

8. Well Name and No.
Southman Canyon 8-4-J

9. API Well No.
43-047-32542

2. Name of Operator
SNYDER OIL CORPORATION

10. Field and Pool, or Exploratory Area
Southman Canyon

3. Address and Telephone No.
P. O. Box 695, Vernal, UT 84078 801/789-0323

11. County or Parish, State
Uintah, Utah

4. Location of Well (Footage, Sec., T., R., m., or Survey Description)
1625' FSL 2200' FEL NW/SE
Section 8, T10S, R23E

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
[X] Notice of Intent	[X] Abandonment	[ ] Change of Plans
[ ] Subsequent Report	[ ] Recompletion	[ ] New Construction
[ ] Final Abandonment Notice	[ ] Plugging Back	[ ] Non-Routine Fracturing
	[ ] Casing Repair	[ ] Water Shut-Off
	[ ] Altering Casing	[ ] Conversion to Injection
	[ ] Other _____	[ ] Dispose Water

(Note: Report results of multiple completion o
Completion or Recompletion Report and Log f

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directio ally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Snyder Oil Corporation request approval to permanently plug & abandon the subject well per the attached procedure.

RECEIVED
NOV 03 1997
DIV. OF OIL, GAS & MINING

Accepted by the Utah Division of Oil, Gas and Mining

FOR RECORD ONLY

14. I hereby certify that the foregoing is true and correct

Signed Lucy Nemec Title **Senior Clerk** Date **29-Oct-97**

(This space for Federal or State office use)

Approved by _____ Title _____ Date _____

Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*See Instruction on Reverse Side

PROPOSED PLUG & ABANDONMENT PROCEDURE
SOUTHMAN CANYON 8-4J
1625' FSL & 2200' FEL, NWSE, SEC 8, T10S-R23E
SLB&M SURVEY, UINTAH COUNTY, UTAH
FEDERAL LEASE DESIGNATION: U-37355

1. MIRUPU. PU 2-7/8" work string and TIH open ended to insert baffle at 354'. RU cementers and spot a balanced plug from 354' to 5' below surface (349' of cemented interval) using 130 sxs of Class G neat cement @ 1.18 cu ft/ sx yield and 15.8 ppg slurry weight.

2. POOH. LD work string. RDMOPU. WOC 24 hours.

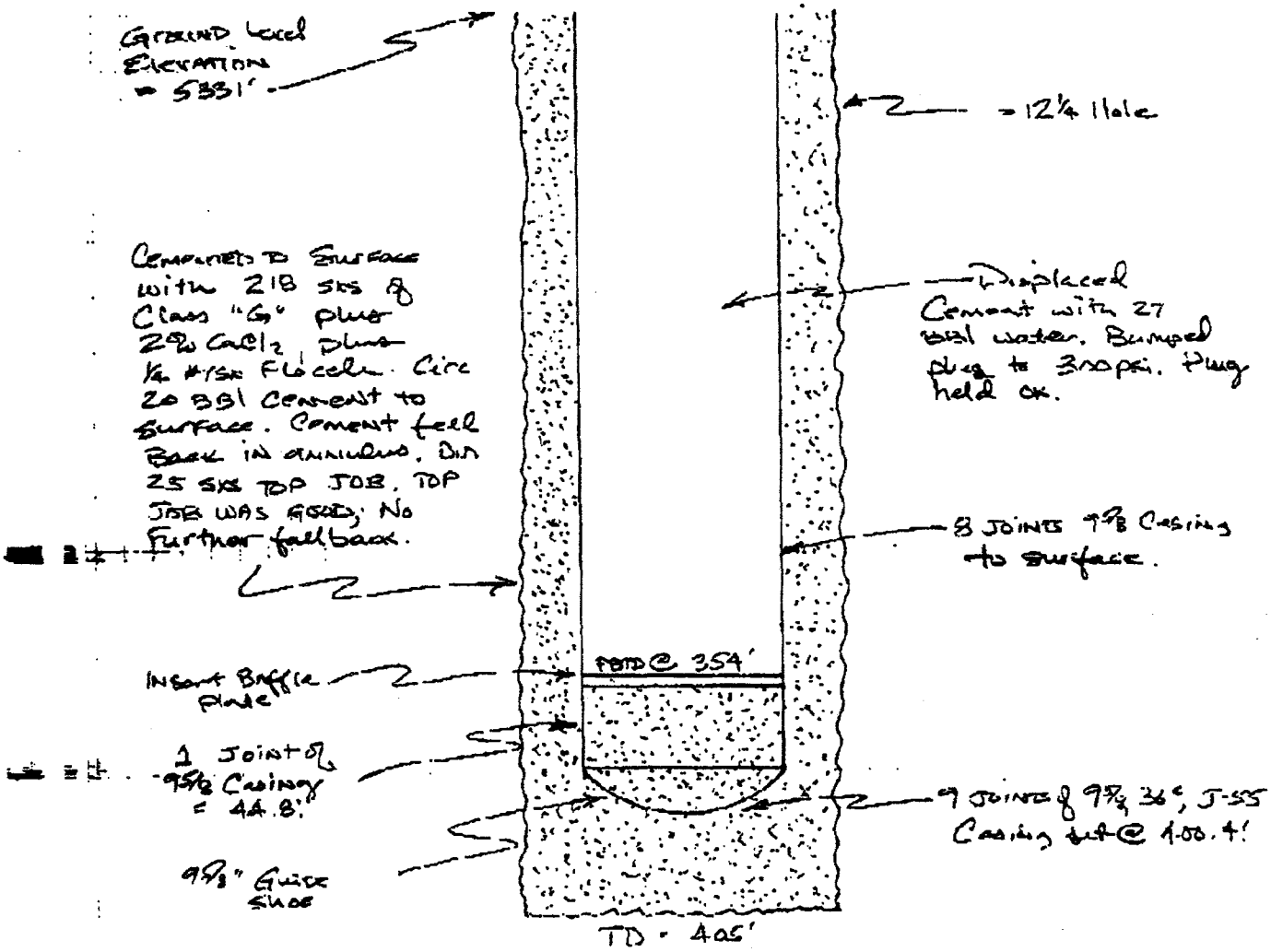
3. Dig out csg and cut off 5' below ground level. Weld plate on top of casing. Backfill hole. Place P&A marker.

4. Reclaim location as follows:

   a) Finish backfilling reserve pit.
   b) Re- contour location to original grade.
   c) Rip 4800' of access road and re- contour to original grade.
   d) Spread topsoil over all disturbed areas in road and location.
   e) Drill in seed of natural foliage to BLM mix specifications.

SNYDER Oil Corporation
SOUTHMAN CANYON 8-4J
1625' FSL & 2200' FEL (NWSE), SECTION 8, T10S-R23E
SLB&M SURVEY, UINTAH COUNTY, UTAH.

CURRENT WELLBORE DIAGRAM



SPUD DATE = 11/2/94
RDMO RATHOLE RIG ON 11/5/94 AFTER RUNNING & CEMENTING CSG.
NEWER DRILLED OUT OF SURFACE CASING
DEPICTED ABOVE.

Lease Designation U-37355

10/28/97

Santa Fe Snyder Corporation

August 5, 1999

Completion Reports
Southman Canyon #8-4J &
Horseshoe Bend #9-4
Uintah County, Utah

Ms. Carol Daniels
State of Utah
Division of Oil, Gas & Mining
1594 West North Temple, Suite 1210
Salt Lake City, Utah 84114

Dear Ms. Daniels:

As you requested, attached please find completion reports for the referenced wells.

If you have any questions or need additional information, please call me at 303-592-4643.

Sincerely,

Sheila Bremer

Sheila Bremer
Drilling Permit Specialist

Attachments

cc: Bureau of Land Management, Vernal, UT

1625 Broadway
Suite 2200
Denver, Colorado 80202
303/592-8500
Fax 303/592-8600

(November 1983)
(formerly 9-330)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED
AUG - 9 1999
DIV. OF OIL, GAS & MINING

SUBMIT IN DUPLICATE* (See other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0137
Expires August 31, 1985

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

5. LEASE DESIGNATION AND SERIAL NO.: UTU-37355
6. IF INDIAN, ALLOTTEE OR TRIBE NAME: N/A
7. UNIT AGREEMENT NAME: N/A
8. FARM OR LEASE NAME: Southman Canyon
9. WELL NO.: 8-4J
10. FIELD AND POOL OR WILDCAT: Southman Canyon
11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Section 8-T10S-R23E

1a. TYPE OF WORK: OIL WELL [ ] GAS WELL [X] DRY [ ] Other

1b. TYPE OF WELL: NEW WELL [X] WORK OVER [ ] DEEP-EN [ ] PLUG BACK [ ] DIFF. RESVR. [ ] Other

2. NAME OF OPERATOR: Santa Fe Snyder Corporation — Attn: Sheila Bremer

3. ADDRESS OF OPERATOR: 1625 Broadway, Suite 2200, Denver, CO 80202 — 303-592-4643

4. LOCATION OF WELL (Report locations clearly and in accordance with any State requirements.*)
At Surface: 1625' FSL & 2200' FEL (NWSE)
At top prod. Interval reported below: Same
At total depth: Same

14. PERMIT NO. API	DATE ISSUED	12. COUNTY OR PARISH	13. STATE
43-047-32542	09/20/94	Uintah	UT

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (Ready to prod.)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
11/02/94	11/03/94	-- 11-4-97 (CD	5331' GR	

20. TOTAL DEPTH, MD & TVD	21. PLUG, BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS
405'	354'	--	---->		

24. PRODUCING INTERVAL(S), OF THIS COMPLETION--TOP, BOTTOM, NAME (MD AND TVD)*: N/A

25. WAS DIRECTIONAL SURVEY MADE: No

26. TYPE ELECTRIC AND OTHER LOGS RUN: N/A

27. WAS WELL CORED: No

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
9-5/8"	36#	400'	12-1/4"	243 sx G w/2% CaCl & 1/4# Flocele	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)

31. PERFORATION RECORD (Interval, size and number)

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping--size and type of pump)	WELL STATUS (Producing or shut-in)
		P&A

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD ---->	OIL--BBLS.	GAS--MCF.	WATER--BBL.	GAS-OIL RATIO

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE ---->	OIL-BBL.	GAS--MCF.	WATER--BBL.	OIL GRAVITY-API (CORR.)

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)

TEST WITNESSED BY

35. LIST OF ATTACHMENTS: P&A Sundry

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED Sheila Bremer TITLE Drilling Permit Specialist DATE 8/5/99

***(See Instructions and Spaces for Additional Data on Reverse Side)**

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

FORM 3160-5
(June 1990)

NITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry a different reservoir.
Use "APPLICATION FOR PERMIT -" for such proposals

SUBMIT IN TRIPLICATE

RECEIVED
JUN 24 1999

5. Lease Designation and Serial No.: UTU-37355

6. If Indian, Allottee or Tribe Name: N/A

7. If Unit or CA, Agreement Designation: N/A

1. Type of Well: [ ] Oil Well [X] Gas Well [ ] Other

8. Well Name and No.: Southman Canyon #8-4J

9. API Well No.: 43-047-32542

2. Name of Operator: Snyder Oil Corporation — Attn.: Phyllis Sobotik

10. Field and Pool, or Exploratory Area: Southman Canyon

3. Address and Telephone No.: 1625 Broadway, Suite 2200, Denver, CO 80202 — 303-592-8668

11. County or Parish, State: Uintah, Utah

4. Location of Well (Footage, Sec., T., R., m., or Survey Description)
1625' FSL & 2200' FEL NW/SE Sec. 08-T10S-R23E

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
[ ] Notice of Intent	[X] Abandonment	[ ] Change of Plans
[X] Subsequent Report	[ ] Recompletion	[ ] New Construction
[ ] Final Abandonment Notice	[ ] Plugging Back	[ ] Non-Routine Fracturing
	[ ] Casing Repair	[ ] Water Shut-Off
	[ ] Altering Casing	[ ] Conversion to Injection
	[ ] Other _____	[ ] Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Snyder Oil Corporation plugged and abandoned the subject well November 4, 1997. Plugging operations were witnessed by Mr. Owen of the BLM Vernal office.

RIH to 290' with 2-3/8" tubing. RU BJ Services. Mix & pump 130 sx Class G Neat cmt. Slurry wt 15.8 lbs/gal; slurry vol 1.14 cf/sk. Set balanced plug from 290' to surface. POOH with tubing and filled casing to surface with cement. WOC 24 hrs.
Dig out around csg to 5' below ground level. Cut off csg. Weld plate on top of csg. Backfill hole.
Old style P&A marker approved by Byron Toleman.

No surface equipment remains on location. Waiting on BLM recommendation for location restoration.
Please contact Phyllis Sobotik at 303-592-8668 if you have any questions.

RECEIVED
AUG - 9 1999
DIV. OF OIL, GAS & MINING

14. I hereby certify that the foregoing is true and correct
Signed Phyllis Sobotik Title Sr. Regulatory Specialist Date 22-Jun-99

(This space for Federal or State office use)
Approved by Byron K. Toleman Title Nat. Res. Prot. Spec. Date 7/8/99
Conditions of approval, if any:

CONDITIONS OF APPROVAL ATTACHED

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*See Instruction on Reverse Side